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ED SPEAK

People say everything is bigger in the States. After a week in Las Vegas for SEMA, I can vouch for that being absolutely true. The food, the buildings, the cars, the cost, the people, and, of course, the shows are all XXXL – SEMA included!

You can see that for yourself over on page 23, in our 10-page report. That might sound a bit extreme for a show report. But believe me, we could have tripled that – however, that would have left very little room for the rest of this month's magazine.

And the rest of this magazine is just as special, with features on Ben Walker's A45 AMG, and Dragon's mad Mazda, plus our Interior Designs feature. Also make sure you head to page 10 and have a look at the 35 cars selected for our Car of the Year competition – don't forget to register your vote before 16 December.

Talking of things that are getting bigger – no, not our Midge (You cheeky git – Midge), this brings me nicely on to next month's magazine. In 2019, Fast Car is going supersized! Yup, the publisher is splashing out on bigger and better quality paper that will showcase our awesome automotive photography and give the magazine a premium feel. This is one New Year New Look you can believe in. Until then, enjoy the magazine and have a wicked Christmas. We hope Santa brings you those WORK Equips you've been dreaming of.

Big Love,

Jules

NEW LOOK ISSUE ON SALE FRIDAY 4 JANUARY



SLIM JULES
EDITOR

"What's going to be big in 2019? Lots of things, including Midge's belly."

Seventeen years in publishing including a spell as a paparazzi, IMIAL Level 2 Mechanic, Poppadom Eating World Championship runner-up, Race National B Licence holder.
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MIDGE
CONTRIBUTING
EDITOR

"Oi, leave it out. You'll give me a complex. You're still fatter than me. Just."

Uber-short serial Gumballer and monster truck driver, IMIAL Level 2 Mechanic, built 12 feature cars, five cover cars, five rally cars, has a degree in pottery and an addiction to Red Bull.
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INITIAL G
ART EDITOR

"Does this bigger magazine mean I have to resize all the feature templates?"

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GLENDIA
WEBSITE EDITOR

"You could leave them the same. But all the features would have borders."

Social media guru, Gumballer, IMIAL Level 2 Mechanic, beard connoisseur, fully qualified lifeguard, purveyor of super lows and very large feet.
Also likes cars rather a lot.
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This Hilux is MX-5-powered

Words & Photos Daniel Bevis

CAFFEINE & MACHINE

Your new favourite place has opened up just outside Stratford-upon-Avon. We went to the opening day to munch on sausage and drink in the atmosphere...

Petrolheads rejoice: we've got a new hangout, and it rocks. Caffeine & Machine sits just outside Ettington, Warwickshire, and it offers something unique in the field of our favourite activity (which is standing about and looking at cars) – imagine a sort of upmarket Ace Cafe, crossed with a Mayfair private members' club, set in a woodland surrounding, with the beguiling aromas of coffee and sausages wafting about the place. Pretty inviting, right?

The brainchild of a chap named Phil McGovern, Caffeine & Machine is a café, a pub, a guest house, but most of all a place where you can guarantee that whenever you drop in for a brew, whatever time of year, there will always be a selection of cool cars scattered about the place for you to drool over. It hasn't been created for the sake of tongue-in-cheek novelty. There's no crap Route 66 signs or flashy neon – it has a cool, laid-back vibe, and is impeccably crafted, super-premium and yet totally accessible.

We went along for the opening day in late October, and were frankly blown away by the quality and diversity of the cars on display. We rocked up in a Le Mans Casio-liveried Toyota GT86

because that's just how we roll, and were directed to park on display among the trees with a Mäkinen Evo, Hemi 'Cuda, Delta Integrale, Bonneville Octavia, and a 488 GTB. This pretty much sums up the diversity of the place. And elsewhere we found hot rods, drift weapons, widebody

911s, boxfresh SVO Jaguars, rally cars, aircooled VeeDubs, retro supercars – it's a constantly shifting scenescape, and every day you visit will provide a different selection of automotive treats. You should check it out!

<http://caffeineandmachine.com/>



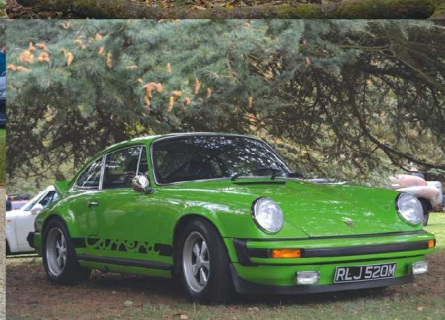
I took my chevy to the levy Caffeine & Machine



Full feature on Driftwork's 964 Turbo coming soon



One word. Legend



Driftworks

With a bunch of high-profile names from the automotive sector involved in the organisation, the Caffeine & Machine team are able to pull a lot of strings to get the coolest cars to park up outside the venue. For the launch day, the guys at Driftworks brought down a whole stable of custom builds to wow the crowds, including the MX-5-powered Hilux that we featured a few months ago, the iconic DW86 – which is an AE86 Corolla with an LS V8 – and the DWR32, an R32 Skyline which ruffled a lot of feathers a few years back with its 1JZ motor! The team also brought their awesome RWB 911, along with a jaffa-orange S15 Silvia that stared people down as they entered the car park. These boys and girls are always guaranteed to bring the noise.

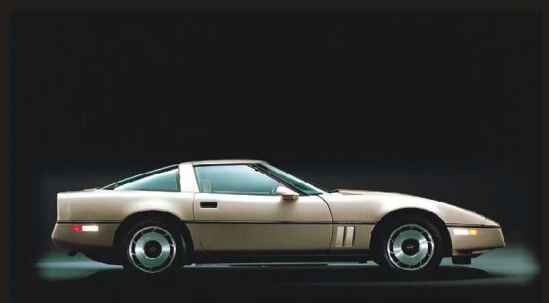
APPRECIATING DEPRECIATION



CHEVROLET CORVETTE (C4) THEN £50,000 NOW £11,000

It's easy to knock American sports cars, when viewing them from a European perspective. There's a general feeling that cars in the US aren't designed for corners; that they sacrifice chassis poise and handling finesse for the quasi-solution of just shoving a massive V8 in there.

For this reason, C4 Corvette owners allow themselves a wry smile, letting everyone believe their cars are rubbish before unexpectedly leaving the haters in their dust. You see, Corvettes are actually awesome. Ever since their inception in 1953, they've always been made of fibreglass or plastic composites, meaning they're relatively light, and the C4 generation (1984-96) was genuinely excellent. It had all-independent suspension, huge brakes with aluminium calipers, and even featured a transverse fibreglass mono-leaf spring at the front in place of traditional coils; this was a third of the weight of steel springs while also acting as an anti-roll bar. See, this wasn't just dumb muscle-car grunt – this was an intelligent and holistic effort to build a capable sports car. Launch models had 205bhp, but the power steadily climbed over its production run, with run-out 1996 cars having 330bhp. (And the super-rare Lotus-developed ZR-1 had 375bhp!) Prices for a decent C4 start at about £11,000 today which, given that this was the equivalent of a £50k car in the mid-nineties, is a pretty bargainous way to prove people wrong on your favourite local race track or country lane.



Word Search

There are eight electric cars in here. Just for fun, how many can you find? Go...

M	N	Y	J	Z	G	G	V	Z	R
J	M	E	H	S	F	C	S	G	I
R	P	Z	U	C	J	Z	O	E	M
A	V	B	H	P	V	O	O	L	A
P	Q	L	B	L	F	F	V	E	C
I	S	J	R	I	N	M	D	A	P
D	Q	V	E	K	G	I	F	F	P
E	M	O	D	E	L	S	O	Q	Y
E	I	P	A	C	E	Q	B	J	P
W	R	L	R	O	L	S	Q	K	X

1.



2.



Quiz Time

Think you know your cars?
Test yourself.

Q1) Name the wheel?

Q2) Name the car?

Q3) Name the rear cluster?



Word Search: Leaf, Models, Zoe, I-PACE, e-UP, Rimac, Rapidee and Nio
Answers: 1) SSR Professor SP1, 2) Mazda RX-7 (FC), 3) McLaren MP4

Ben Smith's Mk2 Golf is packing a VR6 punch



Coming Soon

As we enter 2019, the modified car scene has never looked so good. We've got tons of cars to capture from SEMA and even more home-grown talent to expose, including these awesome hatchbacks...

Tim Joyce's bagged ST225 has power and style



"DIPSTICKS. NO, NOT YOU! THE THINGS YOU USE TO CHECK YOUR CAR'S OIL LEVEL. THEY'RE VITAL BUT ALSO, MORE OFTEN THAN NOT, A RIGHT BLOODY PAIN IN THE ARSE TO USE!"

Now, it's good practice to check your car's oil every couple of weeks, but let's be honest, we don't, do we? Nope, it sometimes takes that little red oil can light to illuminate on the dash before we pull the bonnet catch and look for the dipstick. The problem now, though, is the engine's hot and the dipstick has been precariously placed within touching distance of the exhaust manifold. You're not only just checking the oil but trying to avoid second-degree burns. Of course, you should wait until the engine has cooled but we are far too impatient for that nonsense.

But it's only once you've checked the level (and dripped oil all over your new kicks), that the real fun begins. Yep, trying to get the bloody thing back in the hidden microscopic hole while the flimsy bit of metal, that has more bends than the Nürburgring, flaps about.

At least topping up the oil is an easy job, well, if you can find a funnel...

The Angry Man



Disclaimer: The opinions expressed herein are not necessarily those of Fast Car or the publisher. So fuck you :)

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bola.



B18





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CAR OF THE YEAR

Britain's got talent (so has America and Europe)! Check this lot out...

Since January 2018's issue hit the shelves, we've featured 94 cars – all of which were awesome! But which one was the most awesome? Well, that's a matter of opinion and although our Slim Jules sees himself as the Simon Cowell of the car world, the only fair way to crown the best build of 2018 is to let you, the public, decide. We've whittled the 94 contenders down to the top 35 – basically because we didn't have enough room for everyone (we're sorry if you're one of the 59 who hasn't made the cut. We still love you). It's now down to you to choose the winner. Voting is open, but will close at midnight on 16 December – please don't vote after this date as your vote won't count and you might still be charged. You won't really be charged. It's free. We've just always wanted to say that. Anyway, the nominations are...



Jordan Green's VW Scirocco – Issue 389

Top Mods: Ingo Noak wide-arch kit, VIP Modular rims, Air Lift suspension, Recaro CS seats



Gary Sung's Honda Civic – Issue 389

Top Mods: Carbon front arches, 237bhp N/A forged engine, Fifteen52 TR alloys, Fiesta Turbo Recaro seats



JJ Dubec's Honda NSX – Issue 390

Top Mods: Liberty Walk widebody kit, Armytrix titanium exhaust, Savini SV 67-XC 3-piece wheels, Air Lift suspension



Sam Curtis' Mk2 Golf – Issue 390

Top Mods: 1.8-litre 20v turbo, Longbeach blue respray, retrimmed Mk4 GTI seats, BBS RA splits, Air Lift suspension



Auto Finesse VW Golf – Issue 391

Top Mods: 1.8-litre 20v turbo, Kamei X1 bodykit, Ronal Racing magnesium centre locks, Bride Low Max buckets



Simon Lynn's Honda Civic – Issue 391

Top Mods: Nardo Grey, Spoon carbon spoiler, Takata seats, BBS RM wheels, mad fitment



Andrew Britton's BMW M4 - Issue 392

Top Mods: 3SDM split rims, Liberty Walk widearch kit, Air Lift suspension, AccuAir e-Level management



Jorge Lupton's Honda Civic - Issue 393

Top Mods: Peach paint, JDM tailgate, BBS RM rims, Air Lift suspension, DC2 Recaro seats



Thomas Nguyen's Nissan 370Z - Issue 394

Top Mods: Aimgain wide-body conversion, AAM Competition twin turbo kit (666whp), WORK Meister S13P wheels, Akebono BBK



LB Europe Lambo Aventador - Issue 394

Top Mods: Liberty Walk bodykit, Mercedes-AMG Green Hell Magno paint, 800bhp tuned V12, full Fi Exhaust system, full interior retrim



Conrad Bradley's Toyota AE86 - Issue 395

Top Mods: 3S-GE BEAMS engine, TODA everything, MoTec management, J-Blood styling, Watanabe wheels, AIM MXL digi dash



James Robinson's Toyota Hilux - Issue 395

Top Mods: Mazda MX-5 1.8-litre twin-cam, Subaru TD04 turbo with G19 Engineering turbo kit, WORK Equip 40 wheels, Driftworks HSD coilovers



Austin Barnett's Subaru Impreza - Issue 395

Top Mods: MntRider Designs wide-body kit, Skyline GT-R RB26 engine conversion (713whp), Air Lift suspension, Runduce BBK



Jay McToldridge's 240Z - Issue 395

Top Mods: BRE splitter and ducktail spoiler, 2.8-litre straight six, triple Weber carbs, Rotiform GTB wheels, BC Racing coilovers



Carl Taylor's Nissan 180SX - Issue 396

Top Mods: Porsche Signal green paint, Rocket Bunny bodykit, Rotiform RBQ wheels, Rotor BBK, Air Lift suspension



Remco Gijzen's Opel Kadett - Issue 396

Top Mods: 2.0-litre 16v XE engine, Astra F door handles, BBS RS wheels, Beltenick 5-point harnesses, custom roll cage



Matt Clifford / Reflex Porsche 997 - Issue 397

Top Mods: Old & New Flachbau (slant nose) bodykit, painted Rothmans livery, Recaro Pole Position seats, Rotiform LVS split rims



Luke Massy's RS6 - Issue 398

Top Mods: Carbon bonnet, roof, roof rails, bootlid, spoiler, wings and front bumper; MTM tuning box (700bhp), Plush Automotive hex retrim



Pipey McGraw's E Type - Issue 398

Top Mods: S65B40 V8 M3 engine conversion, ITBs with velocity stacks, VX220 race diffuser, Sierra Cosworth rear axle with LSD



Chris Coulton's Civic Type R - Issue 398

Top Mods: Carbon-styling, Japan Racing wheels, Skunk2 lower control arms, K-System Brembo brake conversion, Safety Devices roll cage, Sparco buckets



Sol Peer's VW Golf - Issue 399

Top Mods: Porsche Riviera blue respray, R30T engine (500bhp), Precision 6262 turbo, side-exit exhaust, stripped interior, OMP cage

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Rae Gami's VW Golf - Issue 399

Top Mods: Lambo yellow paint, USDM bumpers, fully forged 2.8-litre VR6 turbo engine (700bhp), Emerald K6 ECU, 4wd conversion



Simon Davies' Toyota Soarer - Issue 399

Top Mods: Audi Ipanema brown respray, fully forged 1JZ-GTE engine (620bhp), Air Lift suspension, Cosmis wheels, custom EMP exhaust



Meguiar's Datsun Sunny - Issue 399

Top Mods: '09 Racing Hakatora kit (front-end conversion) rear arch flares, AutoStar Kanji wheels, Air Lift, Porsche Pasha centred Cobra Nogaros



Kieran Williams-Carr's Clio RS200 - Issue 399

Top Mods: Custom wide arch kit, Oak green paint, BBS RS wheels, roll cage, Megane 225 2.0-litre F4RT engine conversion



Rich Fox's Focus RS - Issue 400

Top Mods: WRC front bumper, Auto Specialist wide-arch bodykit, tuned engine (671bhp), Bola B12 19in wheels, custom VIBE install



Dan Smith's Skyline GT-R - Issue 400

Top Mods: Custom respray in blue/purple, carbon bonnet and front wings, Do-Luck bodykit, forged block, Wiseco forged pistons, leather retrim



KEAN Suspension E46 M3 - Issue 400

Top Mods: Rocket Bunny Pandem kit, carbon front end, candy red VIP Modular VLS450 wheels and Kirkey race seats, KEAN air-ride suspension



James Williams' Imp - Issue 400

Top Mods: Martini Racing stripes, Air Lift suspension, Weller Supersport wheels, Suzuki Swift seats with tweed centres



James Raper's Fiat 500 - Issue 401

Top Mods: Abarth Aspetto Corse livery, STG Performance front and side exit exhaust, stripped interior, roll cage, JOM coilovers



Gabriel Couty's Mk1 Golf - Issue 401

Top Mods: Carbon everything (well almost), 2.8-litre VR6 conversion, smoothed bay, Kirkey race seats, RAD VR Zero-lip wheels, digital dash



Pete Blackhurst's Honda Civic - Issue 401

Top Mods: Vision Autoworks candy and flake custom paint, 13x-7in wire wheels, full hydraulic suspension set-up



Jordan Saunders' Mazda RX-7 - Issue 401

Top Mods: '99-spec front bumper, carbon front lip, Civic Spoon mirrors, 6Reddy TD04 turbo, HKS intercooler, copper plated SSR SP1 wheels, Air Lift suspension



Justin Tan's Lambo Huracán - Issue 401

Top Mods: Ad Personam Viola SE30 paint, Liberty Walk carbon fibre bodykit, 1016 Industries carbon bonnet, 20-inch PUR Wheels LX11



Mark Chamberlain's 350Z - Issue 402

Top Mods: fully custom Funkeefish wrap, Rocket Bunny bodykit, Ferrari GTE rear wing, Bosozoku-inspired interior, 20in Moonsteel Smoothie wheels

And the Winners Are...

The winner (as well as the runners-up) of Fast Car's 2018 Car of the Year Award will be announced in February's edition of the magazine, on sale Friday 4 January 2019.

How to Vote

To have your say in who takes home the prestigious trophy (which, um, we haven't bought yet) and the bragging rights of winning Fast Car's Car of the Year 2018, simply type in **www.fastcar.co.uk/coty2018** and pick your favourite. You could change someone's life. So don't delay - vote today!



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Krautrock

Ben Walker's A45 AMG doesn't just talk the talk with its show-winning looks - it brings the noise and shouts like a Teutonic mentalist...



STRICTLY
NO ENTRY
BEYOND
THIS POINT
(STAFF ONLY)



HOT RIDES: MERCEDES A45 AMG

Forge Motorsport Stage 2 remap helps push power to 440bhp



Germany might not be the first country that springs to mind when you think of rock 'n' roll, as an infamous exchange from High Fidelity neatly summarises: "You wouldn't be familiar with our immediate influences, they're mostly German."

"Kraftwerk? Falco? Hasselhoff?"

Nevertheless, they've had their musical moments as a nation. Who doesn't like a bit of Can, Faust, or Die Toten Hosen? The spirit of screaming rebellion is there. You've just got to look beyond all of the lederhosen, foaming steins, huge suspicious sausages, and unnecessary racial stereotypes.

The Bundesrepublik's prolific guitar-band heritage directly feeds into countless areas of popular culture, not least the design and manufacture of automobiles. So let's shoehorn in a painfully stretched 'what if' here, and imagine that the Mercedes-benz showroom line-up were a rock band. What would fulfil each role?

Well, you'd have to have the G-Wagen on bass for starters; bass players are rugged and hardcore. The CLS350 Shooting Brake would be the drummer – it's a bit naughty, but also very

practical. Guitarist? That'd be the GLA45 AMG, simultaneously deranged and precise, and unashamedly larger than life. And the frontman? You're looking at it right here across these very pages – the crowdsurfing mentalist that is the A45 AMG.

Every credible band needs a wild, noisy lunatic at the front of the stage, and the shouty A45 fulfils this role with gusto. If you haven't driven one of these yet, there's something that you really need to add to your automotive bucket list: full-bore flatshifting one of these in a tunnel. The whipcrack explosions from the spangly tailpipes sound like you're being strafed by Spitfires. Spitfires with whips. It's hilarious.

The A45 really is beautifully antisocial. It's Johnny Rotten. It's GG Allin. It waves two fingers at the traditional concept of the hot hatch. Whereas the bloodline of the original Golf and 205 GTIs, and of course their numerous brethren, may have somewhat transmuted over the years from 'sensible car that's quite quick' to 'quick car that happens to be quite sensible', the A45 AMG takes the concept of the 21st-century hot hatch to an absurd and extreme caricature.

It has somewhere in the region of 380bhp in factory-standard form – the same as an early Lamborghini Countach – from a four-cylinder motor. That's a pretty rock 'n' roll hatchback. It's all about hedonistic excess.

The Petronas-liveried car you see here, lovingly curated by Ben Walker, is currently working its way through an inevitable chapter of every frontman's story: the part where they've burnt themselves out in a narcotic haze after countless months on the tour bus, been in and out of rehab, and opted to reinvent themselves as a clean-living, straight-edge upstanding citizen. Bourbon and smack make way for quinoa and artisan mineral water. Sport and healthiness suddenly become paramount.

So what better icon for a recovering AMG to aspire to than the long-standing association with the Malaysian oil conglomerate Petronas? This is a name that's been slathered over the Mercedes Formula One team's race cars since the 2010 season, and Lewis Hamilton certainly seems to be doing all right under those colours. It ticks a lot of boxes.

This is an interesting manoeuvre for Ben. The trajectory of his automotive adventures essentially being a short flat line followed by a long and steeply raked one. His first car was a bone-stock VW



8.5x19-inch Rotiform LAS-R and 225/35 Nankang NS20s

**“It’s beautifully antisocial. It’s Johnny Rotten.
It’s GG Allin. It waves two fingers at the
traditional concept of the hot hatch”**



HOT RIDES: MERCEDES A45 AMG



Fox, but by the time he was on his third car he was bolting hydraulic suspension to his Mk7 Fiesta Zetec S, winning the show and shine at Ford Fair and sitting proudly on our very own stand at TRAX. Following that came a 2015 Scirocco, running 370bhp and air-ride and swallowing up about £15k in mods. It's fair to say that, by this stage, he was very much one of us. So why the shift from Wolfsburg to Stuttgart?

"I quickly become bored and unhappy with the Scirocco," reasons Ben. "An overpowered FWD car is all good fun, until it rains. So I started to strip the Scirocco and at the same time look for its replacement – which ended up being the A45. I think compared to its rivals like the Audi RS3, Ford Focus RS and VW Golf R, it's a much more exciting car all round, as well as being something that isn't modified by many people."

With a clear plan of attack, the A45 was purchased in February 2018 from Mercedes Approved, Teesside – a completely standard facelift example, bristling with exciting additions from the options list including the AMG Performance exhaust, aero kit and panoramic roof. And impressively, the mods were getting mapped out way before the keys were in his hand; in fact, three months before he'd even found the car, Ben had bought the 19-inch Rotiform LAS-R wheels and the suspension setup, which consists of AirREX struts and bags along with Air Lift Performance 3P management. The man knows what he wants.

"The wheels then had to be machined to fit, which was done by Fix A Wheel," says Ben. "When I came to fit the suspension, the rear initially sat much higher than the front, and I was sure that if the bags were manufactured differently the car would go much lower. I contacted Indy at The Performance Company, and within a couple of weeks I was sent a pair of redeveloped rear bags, free of charge, which made the car sit perfectly all round."

One of our favourite elements of the A45 AMG is the optional AMG Performance exhaust, as it makes some pretty incredible noises. But although Ben's car came with this option box ticked, it was one of the first things he unbolted. He had sound reasoning, however: "I've always had Milltek exhausts, and their A45 AMG system is next-level," he grins. "MG Auto Motorsport fitted my decat downpipe and non-resonated, valved cat-back, and the car is equipped with Milltek's Active Valve Control – a Bluetooth app that lets you control it and override the standard valve settings on the A45." How cool is that? The car doesn't sound so much like a strafing Spitfire these days as a Led Zeppelin drum solo, in a colossal stadium, with your head between two Marshall stacks. It's insane, frankly. Proper recipe for tinnitus.

"Forge Motorsport have pretty much taken care of the performance side of the build," Ben continues. "The A45 has the Stage 2 remap, side-mount charge-cooler, centre charge-cooler, air

intake, blow-off valve, strut brace, under-chassis brace kit, and the new oil catch can, which was developed on my car. They fitted everything – and it's now pushing out 440bhp."

Yeah, you can't really argue with that, can you? A hot hatch running the sort of horsepower that was once the sole preserve of supercars, along with high-end footwear and the kind of suspension that makes it look devastatingly aggressive on the showground as well as providing ultimate control on fast-road and track driving. This angry little Merc rocks on every conceivable strata. But the thing that really pushes it above and beyond is that unique and eye-catching wrap.

"The design is based on the Petronas Mercedes Formula One cars, along with a British GT style livery," he explains. "I designed it myself, using Forza Horizon and Photoshop, then the graphics were cut on my plotter, and fitted with help from my missus and my dad." It's an offbeat route to creating a custom wrap and the flawless execution is mirrored by the quality of the design – it's a world apart from the artfully dishevelled race-wrap that featured on our cover last month. But it's every bit as enticing.

This wrap, combined with the gleaming wheels and on-point stance, is what's gained Ben entry into every prestigious show





“The design is based on the Petronas Mercedes Formula One cars, plus a British GT-style livery”





#airrideFTW

hall across the 2018 season. But don't go thinking it's a one-trick show-pony. This thing gets used and used hard.

"I own a van and drive that for work, but I use this car for everything else," he assures us. "It's bad on fuel, so pretty expensive to run, but worth every penny as it's such an exciting car to be in! I went to Wörthersee, Austria, in this car, where it was driven just like any AMG car is built to do, and on the autobahn it got to 166mph – and that was before it was remapped. And it excelled on the twisty-turny roads of the Nassfeld Pass. I also took the car on track at Castle Combe at the Forge Action Day, and again the A45 was pushed to its very limits."

This shouty little rock star is a long way from Ben's roots in that budget VW Fox, and he's already pondering the future of the build: option one is to ramp up the power, throw in a load of carbon and make the engine bay all pretty, while option two is to swap the bags for a static H&R setup along with some OZ Racing wheels.

This is a frantic little car with a constantly changing outlook; it's a Jimi Hendrix solo with a Matt Freeman bassline, with Travis Barker on drums and Bon Scott yelling at anyone who comes near. Forget Falco and Hasselhoff, this thing rocks on a whole other level. **FC**

STYLING

Custom Mercedes Petronas F1 vs British GT wrap; AMG Aerodynamic Pack (rear wing, front canards and front lip); smoothed front bumper with numberplate delete; Exclusive Registrations tinted rear plate; AMG GTR Panamericana grille.

TUNING

2.0-litre twin-scroll turbo (M133 DE20 AL), Forge Motorsport Stage 2 remap; Milltek decat downpipe and non-res valved cat-back exhaust with active valve control module; Forge side-mount charge-cooler; Forge centre charge-cooler; Forge air intake; Forge oil catch can; Forge blow-off valve; 7-speed AMG Speedshift DCT.

440bhp; 406lb/ft.

CHASSIS

8.5x19-inch Rotiform LAS-R, 225/35 Nankang NS20s; AirREX air-ride with Air Lift Performance 3P management; Forge Motorsport strut brace; Forge under-chassis brace kit.

INTERIOR

Stock AMG, inc. Alcantara flat-bottom steering wheel, leather/Alcantara Recaro seats, black headlining, ambient lighting, carbon fibre-effect dash; Harmon Kardon audio.

THANKS

Thanks to my sponsors; @MilltekSport, @FixAWheel, @ForgeMotorsport, @Exclusive_Registrations, @AutomotivePassion1; and also to @AirRex_EU, @MGAutomotorsport, @indyw1ndy, @s30bmx, @g17Lee; and most importantly @kelbum.



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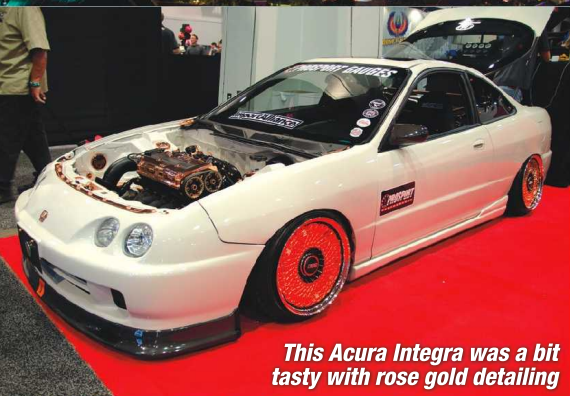
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The view from room 3717 of The Cosmopolitan hotel



This Acura Integra was a bit tasty with rose gold detailing



SEMA 2012

THE SHOW SEASON MAY BE ALL BUT DONE IN THE UK, BUT THERE'S ONE PLACE WHERE THE SUN IS ALWAYS SHINING – VIVA LAS SEMA, PEOPLE!

You know that face a little kid pulls on Xmas morning? The one when they unwrap a new bike or something equally amazing. They go all red, start to shake... it's so overwhelmingly exciting that it looks like they're about to pop. Well, that's exactly how I feel when I think about the Speciality Equipment Market Association (SEMA) Show.

You see, here at FC we love SEMA. And I'm talking literally – we really, REALLY LOVE it! I mean, why else would Jules and myself spend a fair chunk of our own cash visiting one more event quite this close to Xmas?

Now, I know what you're thinking. "Yeah, bollocks, Midge. I bet the mag gives you a stack of bills to bugger off and get pissed-up in America." To be fair, I'd immediately assume that too. The truth is though, if you walked into

any publisher and said, "Hey boss, can we have three grand each, so we can go to Vegas and report on a car show?" You'd not only be laughed out of the office, you'd soon be finding your P45 in the post.

So, why do we do it? Because SEMA is the biggest and most important event on the planet. When we swore our oath as FC monkeys this is exactly the kind of stuff we solemnly pledged to bring you. It's just something of a coincidence that it happens to be in Las Vegas (That's sooo what you told the missus, right? – Jules).

For some reason we can't quite fathom, it's still a trade show that's not open to the public. So reporting on SEMA isn't just a matter of pride, we're duty-bound to get our arses to the casino, I mean the bar, er, sorry, I mean the Las Vegas Convention Centre...

OVER THERE: SEMA SHOW SPECIAL

OEM Plus (and then some)

One thing we've always loved about public opinion across the pond, is that modifying cars seems to be more accepted than anywhere else in the world. In the USA you could almost call it mainstream, messing about with cars is something that spans the generations, it really is a way of life for all ages and people from all walks of life. What this means is that, instead of shying away from people changing up their motors, the OEM manufacturers actually embrace it. They kind of have to, especially as they all want to be at SEMA to promote their ranges!

Kia, Honda and Toyota all laid on top displays this year but, once again, it was Ford that led the way. What these guys do is almost unbelievable. They not only put together a load of modified SEMA Editions themselves, but they invite some of the world's best builders to get involved too. That way you get to see cars like an immaculate Shelby GT500CR from Classic Recreations and Speedkore's bonkers Shelby GT350R Carbon Fiber Edition, sat right next to an RS200 rally car and a stunning 1960 Starliner. Epic stuff!



Well Truck Me!

Every year we're amazed at the array of seriously jacked-up trucks scattered around the show. OK, we know they're all a bit silly, and they definitely wouldn't work on our shores, but there's no denying they make quite the spectacle. That said, we can't help but feel someone was taking the piss a bit when they built this bonkers F350 Super Duty. I mean, I know I'm short, but damn!

Standing at 11-feet high, with five-foot tyres, it's pretty amazing that they're actually allowed to drive this bastard around on the road. Good luck getting your tools in the back of this bugger, although at least doing an oil change isn't too much of a problem. Swings and roundabouts.

FC Favourites

One thing you'll always find at SEMA is that you'll come away with plenty of personal inspiration for cars you'd love to own, and it's no different for me and Jules. In all the years we've been coming, we've never agreed on our favourite motors, but that's a good thing. The world would be far more boring if we all did that, right? Anyway, just in case you were wondering, here's what grabbed our attention...



Jules: Lexus LC 500 & Mazda RX-7 FC

I've had a soft spot for the FC series of the Mazda RX-7 ever since my Dad bought one when I was about eight-years-old. So, when I saw this Pandem-kitted beast on the Toyo stand I instantly fell in love. Look out for a full feature on this RX soon. The other car that I couldn't stop looking at was this bagged Lexus LC 500, it was absolutely stunning and I want it. Unfortunately I haven't got £7.50 in my bank (especially after Vegas), let alone £75,000 to buy one!



Midge: Ford Starliner & Audi R8

"There's not a car here I wouldn't want to own to be honest, but if I have to pick one to bring home, and obviously by that I mean two, it'd be Bev's Ford Starliner. Expertly restored by Walton Customs, and packing a Coyote crate V8, it has to be one of the most immaculate Yanks I've ever seen. I'd also like the camo-carbon R8 V10 on the X Force Stand please, purely for the crazy spoiler-mounted roof box. Obviously, I'd look a bit of a dick tooling around Dartford in that one, but I'd never get all my tools and stuff in a normal R8 would I? In fact, I might even consider chopping in my Navara for one of those. I wonder if they sell those boxes in Halfords?"





1955 Mercedes 300SL

There's no denying that the '50s 300SL 'Gullwing' is one of the most revered classics of all time. Original cars go for a million quid or so nowadays. Still, John Sarkisyan's build here is a little different from that sort of restoration, and that's because, along with its rather epic old-school style, it's packing some distinctly modern performance credentials too. It's not just that NeedsWings-tuned, 400bhp AMG V6 that makes this one a tad more up-to-date than most though. It is in fact, a fibreglass Gullwing body dropped over a whole Mercedes SLK32 chassis. Apparently, it only took Jon six months to build. That long, eh mate? You should have pulled your finger out son.

Top Mods:

SLK32 chassis; Supercharged AMG V6; full custom interior in blue leather; KW suspension; 18-inch HRE 305 wheels.

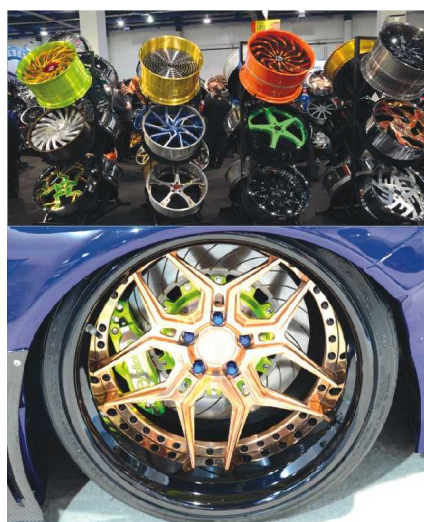


Top Products

When you strip back all the mental cars, the action, the stupidly hot American women and the fact you can tuck into a deep-fried Oreo, a Caesar Salad or a side of beef brisket anytime you're feeling peckish, the real point of SEMA is the products and services. The clue's in the 'Speciality Equipment' bit of the name. It really is the place to see and be seen for any firm serious about being a global player.

What you'll find then, is that much of the event is dedicated solely to these new products, of which there are thousands and thousands. They've got a whole hall of wheels for a start – 160-odd stands of nothing but alloys. It's mental, if my feet didn't hurt so much my brain may well have exploded!

Audio gear, tuning parts for any vehicle on the road, you can even buy yourself a nice plastic rock to park your off-road monster on. And no, I'm not even joking. We can't even begin to scratch the surface of the amount of new stuff to see at the show – but we've had a bloody good crack at it in our very special SEMA products special. Check that out over on page 41.



TOP CARS · TOP CARS · TOP CARS · TOP CARS · TOP CARS · TOP CARS · TOP CARS · TOP CARS

1970 Datsun 240Z

Here's another classic where things aren't quite as they seem at first glance. You'll notice for starters that the normal L24 straight-six has been junked from this particular 240Z and been replaced with a big V10. But this 507hp, 5-litre S85 isn't the only part nicked from an E60 BMW M5. The guys at B Is For Build used most of the drivetrain, wiring and even the original Beemer dashboard too. It's all expertly slotted-in around a custom tubular chassis. Top marks, just for dreaming up this 'Fairlady M' conversion in the first place!

Top Mods:

Custom tubular frame; 240Z body; BMW S85 V10; Rocket Bunny wide arch kit; full gusseted cage; Konig wheels.





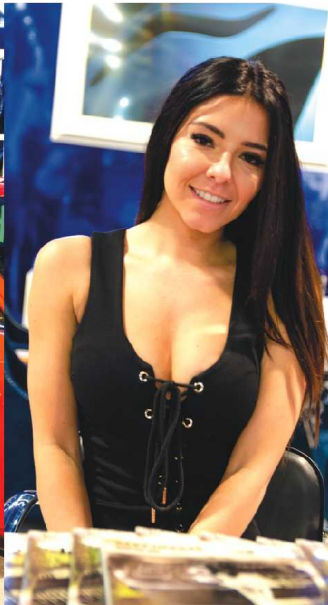
Making it Rain!

We've got a funny feeling someone will be getting sued in the very near future, it is America after all! Still, there's only one thing you can do when you're in Vegas and you see your 300-grand Maybach go up in smoke. Style it out like a proper baller and put it on display anyway. We're not sure if that's the toughest set of Forgiato hoops on the planet, or if they stuck 'em on after the fire, but either way, well played sir. Very well played!

Well, Helloooo Ladies

I've already said that SEMA is important. This trade show is packed with international buyers hoping to find the next big thing to take back to their homeland and make them a modified car mogul. Of course, there has always been one surefire way of selling to businessmen too: the double Ts – tits and teeth!

All the firms break out the big guns for this event. Their livelihood depends on it. Presumably there's no political correctness here either, no equal opportunities, and no HR department keeping an eye on who you're wrapping in logood-up spandex. While I'm convinced they're all rocket scientists in their spare time, I'd imagine the job application for this one isn't exactly extensive. It probably just says, 'must be absolutely stunning'.



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Honda S2000

We're pretty sure this car is the reason they invented the word badass. Sporting some simply ridiculously wide wheels (and loads of camber), along with a wild M&M kit and a weapons-grade exhaust that we're pretty sure can't be legal anywhere this side of the Helmand Province. We reckon it looks nearly as Batman as it does batshit. Still, the real jewel in the crown here has to be that enormous Corvette LS1 under the bonnet. The ultimate marriage of import and American muscle? We like to think so. It's even more amazing that the owner, Felix, says he simply intended to build something reliable to get him from San Diego to all the car shows. Right then mate, that makes perfect sense!

Top Mods:

Corvette 5.7 LS1 V8 engine; Air Lift Performance 3P suspension; R1 Concepts Brakes; VS Forged Wheels; M&M Honda Racing body kit.





On the Outside

So, we know there's a bit of room on the inside, but the outside is equally as big, as is the volume of mental machinery on display. Again, the cars are absolutely amazing big-money builds. In fact, we're always doubly amazed that all these jaw-droppers aren't on the inside!

There's also a healthy amount of crowd-pleasing action going on here. Continental lay on a whole load of drift BMWs for passenger rides out back, and the front is all but taken over by a huge Ford arena where they belt around in their latest performance cars and have quite the knack for making drifting four-tonne pickup trucks look easy.

Of course, it does help that, even in November, it's baking hot. And it also helps that the view of Vegas resorts looming in the background makes everything seem infinitely magical and photogenic. There's just something special about having the whole of Sin City on your doorstep. Of course, I like a Travelodge in Northampton as much as the next bloke, but it hasn't got quite the same appeal.



Stand of the Show

I think by now you're getting the idea. There are many amazing stands, and many displays that make you want to stick up the local Halifax, so you can afford to get in on the action. One thing we're asked every year though, is what the best stand was, and for once we were in agreement. That accolade had to go to the unbelievable eye for quality in the 30-odd car strong display laid on by Toyo Tires. They clearly got right into the Vegas spirit with this collection of stunners, and the sheer size of their stand for that matter. They definitely weren't messing about.





The Motors

The LVCC is massive. 3.2 million square feet (and growing) in fact, and although we don't actually know what that translates to in non-American talk, we do know it's big. Like about five or six times the size of the Birmingham NEC big. Now, any other event would have trouble filling a venue like this – the place is designed to hold three or four huge conventions at the same time. But SEMA is on another level to anything you've ever seen before, so much so that they're never short of display cars. There's a long list of backups waiting around the world to be flown in at a moment's notice too. The result of all this is that only the world's finest motors stand a chance of getting in the carpark, let alone actually inside. All these cars really are something special, even if they're not all to our taste.

One other thing you'll notice is the diversity. There's plenty of American trucks and muscle cars, and rightly so, it's a huge part of the market over there. That said, the big change from when SEMA first started 52 years ago, is that nowadays you'll find it's more of a world-wide affair, covering every single aspect of car culture. The 'imports', as they call them, include everything from Japan, Europe, Korea, South America and just about any other place that's ever thought about knocking out the odd motor.

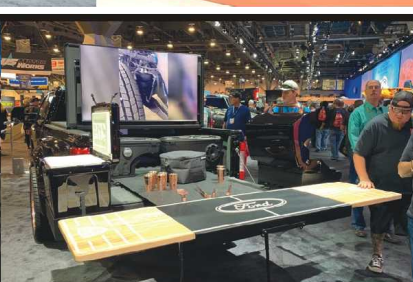
You'll also find road cars that can't even be driven on the street in many states, and a whole collection of motorsport weaponry too. Of course, it'd be easier to list the stuff that's not there. But, I'll be honest, I'm struggling to think of anything they haven't got covered.



Built by Sleepers Speed Shop, this 911 was amongst the best builds of the show



Quad rotor RX-7 was insane!



The Downright Bonkers

SEMA just wouldn't be SEMA without the crazy stuff on display. Immaculate restos, stupidly large trucks and modified monsters are one thing, but it really does take imagination, huge trouser potatoes, and the sort of wallet that takes a fork-lift to get it out of your pocket to even begin to stand out.

Granted, there's a lot of questionable shit too. Nicking a scaffolder's Transit and building a whole car out of what you find in the back immediately springs to mind. But there's also works of sheer genius.

It's pretty nuts to think that, sometime in 2018, someone at Hot Wheels was wondering just how many NOS bottles he could cram in a cut-down pickup, along with a huge Mad Max-style blown V8. It's even more nuts to think that they subsequently made it happen for the show. But you see, SEMA is full of stuff like this. How about a massive dually with a beer pong table and a BBQ on the back? We would have loved to be in that meeting at Ford HQ!



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1977 Porsche 911

You just can't beat a RWB Porsche right? Especially an old-skool example from the late '70s. Except it seems you can. Yep, all you need is a super-sweet interior based on the baseball caps Goldie Lookin Chain used to wear in the early noughties (probably), and a Tesla power-plant pushing out 563EHP, which is about 700bhp in real money. Christ! To be fair, the 'E-RWB' here could have been powered by the motor out of an electric toothbrush for all we care – we'd still think this is one of the best Porkers we've ever seen! Top stuff from StreetFighter LA.

Top Mods:

Tesla engine; RWB widebody; BBS wheels; custom tartan interior with chrome roll cage.



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1988 Ferrari 328 GTS

If we had a car of the show, it would probably be this stunning '80s Ferrari 328 GTS. Rescued by the guys at Exoticar, it was an abandoned project from another builder before they reworked absolutely everything and got it up to this amazing standard. In fact, it was a bit of a wreck to start off with and destined for the scrapper, so even the stuffiest of classic car purists can't really whinge about how it turned out, can they? Easily one of the most talked-about cars of the whole event, it almost broke the internet on the first day.

Top Mods:

Ferrari 458 GT3 mirrors; 288 GTO fog lamps; custom Kevlar widebody; AccuAir E-Level suspension; 9.5 and 12.5x19-inch Rotiform DNO wheels; Ferrari PPG Grigio Medio paint.



OVER THERE: SEMA SHOW SPECIAL



SEMA Trends: Flachbau kits

A couple of years ago we brought you the story of the very first modern Flachbau-kitted Porsche – we found it at the 2016 SEMA Show. Well, these buggers have been running around breeding since then – this year there were, let's just say, more than couple of 911s sporting the famous Old & New Japan kit.

Awesomeness comes as standard with these. They take both serious balls and serious cash to put together. But have you ever been to a wedding with the missus, and then some tasty young lady has turned up wearing the same expensive clobber? She wasn't best pleased, was she? We can't help but wonder if it's a bit like that...



SEMA Trends: Z-Cars

There's been a recent resurgence of old-skool Datsun Z-Cars in the US, and this certainly reflected in the amount on display this year. There was a time when you'd never see a 240, 260 or 280Z at SEMA. In fact, a cheap old Fairlady used to be regarded as a bit of shed compared to the more American offerings. They were the butt of plenty of jokes Stateside too (just look at that battered 280 in Bruce Almighty), they've probably had a harder time over the years than Skoda have over here!

How times have changed though. Nowadays they're hardly cheap and a classic Z-Car seems to be one of THE cars to own and, as one owner put it, "Chuck a semi-load of C-notes at". But that's the thing about classic cars in the US – they're not afraid to pull them apart and start again. And long may that continue!

1991 Mk2 Golf

Very often you'll come across an absolute screamer tucked away and we found Paul Foreman's epic Mk2 Golf Rallye out back on the Liqui Moly Stand.

Another epic Canadian build (this time from Karttwerx Auto way up in Nova Scotia), he's owned this car for 22 years and spent much of that time getting it to a standard that most old Dubs can only dream of. Now sporting a turbo'd R32 lump, AWD and all the trimmings, we wouldn't mind betting this one now shifts a bit too!

Top Mods:

Turbocharged R32 engine; 4Motion AWD conversion; Pandem widebody; Sparco seats with GT1 tartan centres; full weld-in roll cage; Rotiform wheels.



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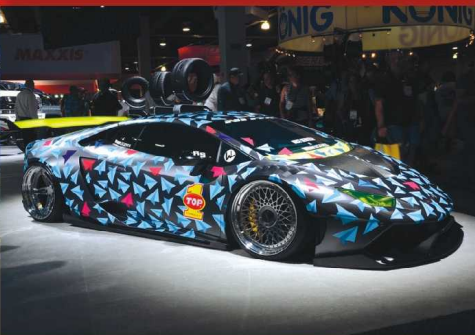




SEMA Trends: British Beef

You expect plenty of Yank tanks at SEMA. You expect Japanese imports, trucks and supercars. And over the past few seasons, German motors have proved to be some of the most popular too. So, what surprised us this time around was the abundance of home-grown Brit models, some being cars that they never actually got in the US in the first place!

It's not just the high-end Jags, McLarens, Bentleys and Rollers that got a lot of love at the show either. There were plenty of 'proper' British classics popping up, including quite a few old-skool MGs and even a Mk1 Escort. Of course, our American chums couldn't resist slapping a V8 into the odd one or two (just check out RM Motorsports Roush Coyote-powered MGB GT here). But that's just their way. It still makes you proud to be British.



SEMA Trends: Modified Supercars

OK, so we know this particular trend is no surprise, chiefly because SEMA always brings out those with the spuds (not to mention the credit limit), to take an angle grinder to their brand-new Lambo. The point is though, a few years ago, when we first started attending the show, you'd see one or two fettled supercars dotted about, and they'd always be some of the biggest crowd-pleasers. Nowadays though, there seems to be madly modded exotica around every single corner. Almost to the point where the more 'normal' cars have become the rare gems and grab all the attention. Still never mind, eh? We wouldn't mind one of these monsters on the drive...

SEMA Trends: Getting in the bloody way!

Yes, I know it's debatable at times, but technically I'm a writer and that means a pen, a note pad and the odd iPhone snap (to serve as a reminder – I'm getting old you see) is all I need to get the job done. Photographers however, have a much harder time at SEMA. What with it being so packed all week, it always takes more than a little while to get that perfect shot.

It's one of the reasons we always have a day off on the Thursday. Jules may have plenty of talent behind his Nikon, but with every bugger walking into your shot (and usually continuing to stand there like a lemon), even Mother Teresa would get frustrated to the point of wanting to insert her tripod into someone. Don't believe us? Here's a few crackers from the 200-odd shots we had to take out...



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1972 Mazda R100

This little '70s Mazda was one of the craziest motors of the whole show. Brought all the way down from Vancouver (we think that's in Canada), by its owner, Rod Nielsen, it's one of those cars where every time you go back, you find yet more amazing details. Packing a 710hp, bridge-ported, single turbo three-rotor lump is one thing though, and he may have ditched the transmission tunnel, so the gearbox is actually inside the car. But, by far the most bonkers thing is the wheel setup. Rod's gone for 16x16-inches on the back, but not in the way you'd expect. It's two 8x16s welded together with two tyres on each corner, just like a dually pickup! Nope, we've never even heard of that before, let alone seen it. Totally and utterly batshit.

Top Mods:

Triple rotor engine; sequential shift conversion; 16x16-inch rear dually wheel setup; blister arches; full cage; Kirkey metal seats with Cipher harnesses; rear fuel cell; extended drag spoiler.

1968 Ford Mustang

Put together by award-winning hot rod builders, American Legends in Arizona, this Mustang has been dubbed 'Corruptt', which may have something to do with the twin-turbocharged Ferrari V8 crammed in under the bonnet. That said, it's easy to get all hung up on the blown F430 lump, but there's enough other body, interior and chassis mods to keep you drooling for hours and hours. It's not just the big stuff like the custom quarters or the roof chop either. Look a little closer and you'll see the devil really is in the detail with this one.

Top Mods:

2.5-inch roof chop; full-custom body; carbon fibre floor pan; custom seats and door panels; Ridetech RidePro X air suspension; AG Forged Wheels.



Famous Faces

Every year SEMA sees the celebrities out in force – you never know who you're going to bump into next. But forget all those so-called 'car guys' you see on the telly, along with racecar drivers and Todd Wotsit from Gold Rush. This year we got to have a chat with a proper legend - WWE Hall of Famer, Hacksaw Jim Duggan.

Of course, you're probably all too young to actually know who that is, but is that going to stop me telling anyone who will listen and strutting around like I own the gaff? Nope! In my eyes there's only one thing that can make SEMA better than it already is, and that's meeting Hacksaw Jim Duggan – hoooooooooooo!



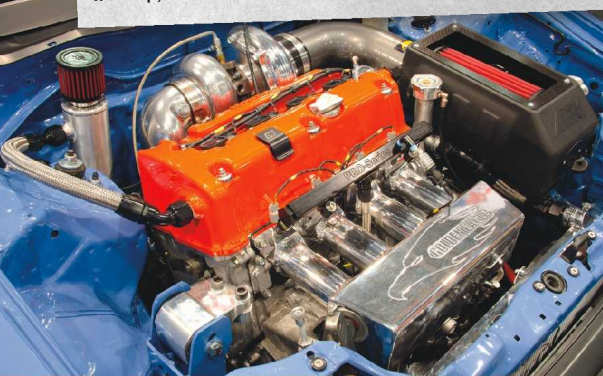
1991 Honda Civic Shuttle

There's always something amusing in a car that, at first glance, looks like it's a grandma's shopping special, only to find it eats supercars for breakfast. To be fair, this little AWD monster from the boys at Bisimoto eats hypercars for lunch too, and presumably Learjets for dinner.

We saw their last Shuttle project a few years ago, and that was running a tiny, turbocharged 1.6 D-Series motor... with 724whp! So god only knows what this new 'upgrade car' is kicking out. Bear in mind that these are the guys who built a 1029whp Honda Odyssey people carrier not too long ago too. These boys certainly love their Hondas!

Top Mods:

1552 wheels; Toyo R888 tyres; sequential box; K24 engine conversion; Turbonetics turbo; roll cage; interior retrim; CRX front lip; custom AEM intake; Quaif AWD diff.



Go next year

The short of it is that you can't, not unless you happen to be 'working' for a firm in the car trade. Then again, we've all got a mate in the business, and it's not always that hard to get a bit of work with them for a week later on in the year... (if you catch our drift). We'll leave you to read between the lines on that one.

Anyway, SEMA 2019 will take place at that Las Vegas Convention Centre from 5-8 November. Check out www.semashow.com for all the details.

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£1,940 + tax

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£2,700 + tax

quantumracing.co.uk



[quantumsuspension](https://www.instagram.com/quantumsuspension)



THE REAL DEAL

There are no JDM-style modifications on this stunning FD RX-7. This is as authentic as it gets...



HOT RIDE: MAZDA RX-7 FD

3B-REW twin rotor running Knight
Sports sequential twin turbos



There are countless, awesome, modified Japanese cars in the UK. But no matter how well they're done, no matter how hard people try, they're never quite the same as how they would be done in Japan.

It's something that's hard to put in to words, but you can always tell the difference between a car modified in Japan and one modified here. In fact you can even tell when cars that have been imported from Japan already highly modified have been further modified once in the UK. The cars just never seem quite the same, almost not quite 'right', ever again.

If you want an explanation of why the Japanese can do it in a way nobody else truly can, you're not going to get one, and nobody could give you a definitive answer. But it's clear to see they've got a real eye for it – every little detail – and they see things as a bigger picture rather than lots of singular parts bolted on.

You know what seems to be the biggest difference though? They don't give a damn what other people think. They build it for themselves and haven't got the culture we have here of worrying about what others think, copying others, and having others try and tell you what you've done is wrong.

A lot of parts fitted to this FD RX-7 probably wouldn't have been if it was a car built in the UK. Partly because they're incredible rare and expensive. And partly because some parts, most might think, wouldn't look all that good. But it's hard to deny this is one of, if not the, nicest looking FD RX-7 in the UK. It's not the wildest looking one out there. But while it looks absolutely nothing like

standard, it almost looks like a factory or race special edition rather than a typical modified car. It's a car that someone who isn't a modified car fan might not even realise is modified; just a super cool sports car. And to pull that look off takes a lot more skill than just building a typical wildly modified car.

So what Japanese car-building genius built this stunning RX-7 then? Well, that's one of the common quirks of buying a Japanese import. Nobody knows!

Ross from rotary specialists Drag Performance spotted this car for sale at one of the huge auction houses in Japan. These auctions have countless amounts of cars going through on a daily basis, but with just a few small pictures and a vague hand-written description (in Japanese), you have to either play it very safe with what you buy, take big risks, or have an incredibly keen eye for the right car.

Thankfully Ross does have that eye, and doesn't mind a risk either. And that's how he snapped up this amazing car, despite it not looking as promising in the auction pictures! "The car was filthy in the images, brown with thick dust. It looked like an abandoned car," says Ross. "But I could see it had some great parts on it, and I love interesting stuff like this. So I took a chance, had a bid, and ended up winning the car".

Despite how the car looked, thanks to the exchange rate, shipping, taxes, and the simple fact that RX-7s are just never cheap, Ross still spent a considerable sum buying and importing it. But his love for RX-7s and the way they tune them in Japan made him take this risk. And when it arrived, he was very glad he had!

“It has pretty much the entire RE-A bodywork catalogue, including the rare and expensive parts”



The RE-Amemiya Super-G rear bumper extends the length of the car by about 6-inches



SEQUENTIAL TURBOS

As big single turbo RX-7s are so common, it's easy to forget that the FD comes with a very clever twin sequential turbo setup from the factory. Rather than two different sized turbos, the FD runs two identical turbos and a set of solenoid-controlled valves. That means it runs off one turbo at lower rpm, bringing it on boost at very low rpm, gradually bringing in the second turbo as the rpm rises, giving great high rpm power.

While often disposed of, as the solenoid control parts are complex and well known to go wrong with old age, the factory twin sequential turbo setup is capable of far more power than many might think.

The current record using the standard twin turbos in full sequential mode is a quarter mile time in the mid 10-second range at around 130mph, which is modern hypercar fast but from 1990s-era standard twin turbos!

HOT RIDE: MAZDA RX-7 FD

The car came to the UK still covered in a layer of dust. "But underneath all that, the thing was pretty much immaculate and after a good wash it was pretty much how you see it today: pretty amazing" says Ross.

While the history of the car is still a total mystery, it seems it was built to a very high standard for fast road or track-day use, and rarely or never used since the original build. It's incredibly fresh, almost like a show car, but has performance-focussed modifications it's unlikely any show car would have.

Starting with the exterior, the car has the RE-Amemiya GT-AD II wide arches, which aren't uncommon, but as well as that, this car pretty much has the entire RE-A bodywork catalogue. Even the incredibly rare and expensive parts most people have never seen. And these rare parts play a big part in to why this thing looks so incredible.

The carbon bodywork extensions all round are some of the more obvious additions that make the exterior look extra special. But the wing mirrors, which are great looking in the standard place and

therefore almost never moved, have been mounted on front wings on this car, which works way better than you'd ever imagine. A fantastic touch.

Without a shadow of a doubt the most controversial part of the bodywork, and the one most people are least likely to do, are those rear lights. With the standard style rear lights on RX-7s looking so good, changing them to some slightly odd rear lenses seems a strange idea. But the difference in looks isn't about the lights themselves, as they're part of the RE-Amemiya Super-G rear end. It actually extends the back end of the car, lengthening it by about six inches vs the standard car, making the side profile look very different, noticeably longer, almost reminiscent of a longtail GT race car, which suits the rest of the body style perfectly.

The car is on coilovers, like you'd expect. But they're made by an ultra-high end UK brand, Quantum Racing, who aren't famous in the modified car world, but make hardcore race-car suspensions, which adds even more mystery to this car's origins.

The car is also rocking a rear rain light, the ultra-bright rear light many race series require cars to be fitted with for racing in low visibility. And it's even got a few extra braces welded in to the front. Was it originally planned to be a race car?

Despite the mixture of show car and race car looks, and some very high-end track-spec modifications, it drives fantastically on the road, and using it as a genuine daily drive is no problem at all if you wished. Rather than a heavily tuned engine and a big single turbo, it features a street-ported engine and Knight Sports uprated twin turbos, still running fully sequential. Which means the car is on boost and pulling strong right from just 2000rpm, giving a massive powerband.

While the interior is pretty standard, it's a great place to be and you sit very low with perfectly positioned controls in a RX-7. There's no mistaking you're driving a true sports car, and a very special one at that. And while it takes some getting used to remembering the



A beautiful rear end

RE-AMEMIYA

One of the oldest and most successful names in rotary tuning, Japanese tuner RE-Amemiya have been building manic Mazdas since the mid-1970s. Founded by rotary legend Isami Amemiya (the RE stands for Rotary Engine by the way), RE-A have built countless legendary road and track rotaries, including winning the GT300 class of Super GT racing in one, and competing in the D1GP drift series. From wild bodykits to building Time Attack monsters, RE-A do it all and have always been the groundbreakers when it comes to RX-7 tuning.



"It just looks so special and nothing else looks quite like it"

Moving the wing mirrors forward has given the car a unique look

TECH SPEC: RX-7 FD



The interior is mostly standard spec

mirrors are now mounted half way down the long front wings, seeing them there always reminds you that you're driving something very special. It's honestly a car you never want to stop driving.

On the day of the shoot, everyone who saw the car instantly fell in love with it, despite most having no idea it was even a RX-7. It just looks so special and nothing else looks quite like it.

This car is available for sale, and after seeing this feature we've little doubt there will be a long queue of people wanting to be its owner. But whoever that lucky person is, while we're all for them adding their own mods, we hope they don't change the magic touch that only ever seems to come from cars tuned in Japan! 🇯🇵



ENGINE

13B-REW 1308cc twin rotor engine; street ported engine; Knight Sports sequential twin turbos; Apexi Power FC ECU; HKS GT alloy intakes; V-mount alloy intercooler and radiator; RE-Amemiya water swirl pot; GReddy intake elbow; Dragon Performance alloy pulleys; RE-Amemiya 4in dolphin tip exhaust system with rolled out tailpipe; HKS EVC-S boost controller; custom alloy brackets.

TRANSMISSION

Factory 5 speed transmission; 1.5 way-plated LSD; rear diff brace.

BRAKES

AP Racing 4-pot front callipers with 330mm Project Mu 2-piece front discs; standard rear callipers with Project Mu 2-piece rear discs; Project Mu pads all round.

SUSPENSION

Quantum Racing coilovers; AutoExe front and rear strut braces; custom welded in chassis strengthening bars.

STYLING

RE-Amemiya Facer front bumper; RE-Amemiya GT-AD II wide front and rear arches; RE-Amemiya GT-AT II side skirts; RE-Amemiya AD9 vented bonnet; modified RE-Amemiya Super-G rear bumper; RE-Amemiya Super G rear lights; RE-Amemiya fender mirrors; carbon GT rear wing; RE-Amemiya headlight intake duct; RE-Amemiya sleek headlights; RE-Amemiya front splitter; front canards; front wing vents, side steps; rear canards; and bonnet vent spoilers; rear race rain light; rear race tow hook; custom freehand painted pin striping.

INTERIOR

Standard late-spec interior with Nardi airbag steering wheel and white dials; Apexi Power FC hand commander; HKS EVC-S boost controller.

WHEELS+TYRES

9x17 (front) 10x17 (rear) Rays Engineering CE28N forged monoblock wheels painted gloss black with 235/45x17 (front) and 255/40x17 (rear) Yokohama Advan Neova AD08 tyres.

CHEERS TO

Dragon Performance - www.dragonperformance.co.uk; Mansell Raceway (for use of the location) - www.mansellraceway.com



PROTECTION, MADE SIMPLE



WWW.AUTOFINESSE.CO.UK/CARAMICS



TAROX £POA DIRECTIONAL 8-POT CALIPERS

We've seen more than a few 8-pot calipers in our time, but never anything quite like this release from Italian brake maestros, Tarox. Launched along with their latest B360 caliper, these B34 GT units here, have a unique directional configuration designed to completely eliminate pad taper wear by equalising pressure across the entire back plate.

The science is in the piston arrangement. Take a peek inside and you'll notice that, instead of being a mirror image, or all the same size, like most aftermarket units. They actually get larger from one side to the other. This setup offers a significantly more balanced distribution of the clamping force when the rotor is turning at speed. Clever, eh?

Anyway, this new design will be the basis for all new launches in the future, and proves once and for all, that not all multi-pot calipers are equal. Magnifico!

www.tarox.com



SEMA SPECIAL FRESH KIT

TOPSPEED TITANIUM F430 EXHAUST, £4620

Constructed from hand-welded, back-purged and pie-cut grade-5 titanium, we're pretty sure we've never seen a more desirable piece of sculptural pipe-work. In fact, we've not been let in on which 'hand' did the fab work on this one... but we have our suspicions that God has just bought himself a TiG welder.

Yes, it's more than a couple of quid, and you'll need a whole load more to buy a Ferrari F430 to put it on, but the point is that sometimes people do things just because they can. That's how you win big in Vegas!

www.topspeedauto.com



SPYDER AUTO PROJECTOR HEADLIGHTS, FROM £770

Projector headlights can be a little Marmite. Some are OK, some are really, really bad. Usually we're not overly keen to be honest, but we like these a lot. Now, that may have something to do with the fact that they're built to OEM quality and are truly direct-fit (with no complicated re-wiring needed). But, we reckon it's most likely because they look the absolute nuts!

Available for the 2015 Ford Focus, 2016 Honda Civic and 2009-2014 Nissan GT-R, these could be just the finishing touch you've been looking for.

www.spyderauto.com



PROCHARGER F3X146 SUPERCHARGER, £5540

It's hard to get a sense of scale from the picture of course, but this thing is massive, about the size of a football... and a proper football - not one of those egg-shaped things the Americans insist on carrying around in their hands.

So, how many horsepower do you reckon this mahoosive centrifugal supercharger can serve up? 1000bhp? 1500bhp? Nope, not even close - this monster is rated at a whopping 3500-bhp plus!

The bloke at ProCharger said it's for, and I quote, "the most extreme racing environments". Yeah, no shit mate!

www.procharger.com



CRAZY SEMA SHIZZLE...

Horn Blasters Conductor's Special Nightmare Edition Train Horn Kit, £615

SEMA just wouldn't be SEMA without some tool in a jacked-up truck letting one of these bastards off every 27-seconds. Always highly amusing. NOT!

That said, when we're not on the receiving end, we can kind of see the appeal. We can certainly think of times on the M25 when we would have killed for one of these. Anyway, every year these kits seem to get bigger and what we've got here is currently the biggest on the market. 4-horns, 2-compressors and an 8-gallon, 150psi tank for hours of fun. Hooooooonk!

www.hornblasters.com



VMS Racing MOAB Bee-sting Aerial, £23

We'd like to say we were surprised when we saw this, the 'Mother Of All Bombs', from accessories firm VMS Racing. But frankly, we're not. If there's one thing they love in the US as much as cars, it's blowing stuff up! Still, what we were surprised about, is that this one is supposed to be a faithful reproduction of the infamous MOAB (Massive Ordnance Air Blast) bomb dropped on an ISIS stronghold back in 2017. Only smaller... er, and an aerial. America, f\$ck yeah!

www.vmsracing.com



GFB KIA STINGER DUAL BOV, £475

Last year, when Kia launched the Stinger, we just knew it would be popular. What we didn't count on was just how popular, there seemed to be loads dotted around the show... and the carpark, and the The Strip. We have the feeling that it's fast becoming the most revered Korean performance car ever! Anyway, as always, that also means that the mods are coming thick and fast, although they're not always cheap. Take this sweet looking dual BOV unit. It's a fair few quid, more than a Kia Cee'd (probably), but we've no doubt that it's worth every cent. A direct bolt-on replacement for the OEM plastic diverter valves, this will improve the performance and sound, and has to be one of the best mods for the Stinger that we've seen to date. Proper job!

www.gfb.com.au



REDHORSE PERFORMANCE UNIVERSAL BYPASS FUEL REGULATOR, £70

Here's a great little innovation. This return-style fuel pressure regulator is not only capable of supporting up to 1000hp and is e85 compatible, but when it comes to blown motors, it's pretty bloody clever too.

The base fuel pressure can be adjusted from 40-75psi as you'd expect, but there's also a boost reference port that raises pressure by 1lb for every 1lb of boost. Definitely one of the best FPRs we saw at SEMA... or anywhere else for that matter.

www.redhorseperformance.com



AIR-ZENITH DUAL COMPRESSOR TANK, £685

The guys at Air-Zenith make all sorts of air ride products, everything from management to struts, but we reckon this second generation evolution of their popular OB2 setup has to be one of the finest.

This one has been designed with a single thing in mind, and that's to be faster than everyone else. The attached dual compressors are rated to an impressive 8.5 CFM flow rate, which means they can fill the 5-gallon tank from 160 to 200psi in just 40-seconds. Oh yeah, it looks pretty darn swanky too.

www.air-zenith.com



Race Ramps Show Rock Display, £405

You didn't believe us in the SEMA report when we said you can buy a solid plastic rock to park your off-roader on, did you? Well, we only speak the truth dear reader, and here it is - a big ol' 17-inch-tall fake rock, and possibly the nuttiest product we've seen in all of our 31-years on the shelves.

If you've got 400-odd nicker to splash on a 'lightweight' boulder, now you know where you can get one. Just don't forget the gnome outfit and fishing rod to go with it.

www.raceramps.com



AWA Composites Custom Carbon Bell Housings, From £4000

Yes, we know you're reaching for your credit card about now, but sadly, you can't have one of these until the end of December, when they start full-scale production. Coming in at less than half the weight of an alloy bell housing, these may be a little decadent, but the best stuff always is, right? Don't worry about fitment either, they'll make one to your own spec. Then again, for that money, we would bloody well hope so.

www.awacomposites.com



SEMA SPECIAL FRESH KIT

920 ENGINEERING GT REAR MONOBLOC CALIPER, £1120 (EACH)

If there's a sexier looking brake caliper on the planet we'd certainly love to see it. Machined from a single piece of high performance alloy, and designed primarily for GT racing, with such elegance and impeccable style we just knew 920 Engineering had to be a British firm... and we were right!

Apart from this particular version, they also engineer a whole selection of monoblocs machined from single-piece castings, billets and forgings. All jaw-dropping, all home-grown, and all works of art!

www.libertyvt.com



MCLEOD TUNER SERIES HONDA B-SERIES MAG FORCE CLUTCH, £1930

No one quite does Hondas like our Yankee chums, even the Japanese guys have trouble keeping up when it comes to B-Series tuning. Still, big power figures need hardcore clutches, and they don't get much more hardcore than this new 'Mag Force' item... come to think of it, that includes the rather hardcore price too!

Equipped with twin 8-inch sintered-iron plates, this monster can hold up to 800lb/ft of torque with ease. That's what scientists refer to as 'a lot'.

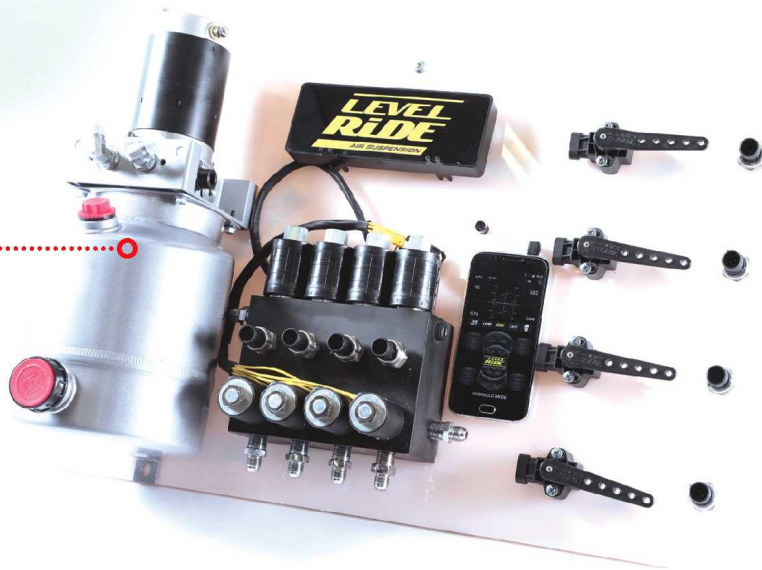
www.mcleodracing.com



LEVEL RIDE HYDRAULIC SUSPENSION MANAGEMENT, FROM £1570

Thought that full-on height and pressure management systems were just for modern air ride setups? If we're being totally honest, so did we. Apparently, that's not the case though, this new system takes everything Level Ride know about air control, and applies it directly to hydraulic suspension. What's even more special about this bona fide industry first too, is that it uses a super-compact motor and manifold combo that takes up less room than most air ride setups, and it can also be paired with their piston accumulators (and 24-point adjustable shocks) for 'sports-style' driving. That's right, performance-focused handling on juice!

www.levelrideairsuspension.com



AWESOME SEMA HOOPS...

BBS FI-R Forged (Bronze Edition), From £1230 (each)

BBS of America have been keeping the Germanic dream alive for years now and, for SEMA, they always lead with a collection of 'showpiece' wheels designed to be the best of the best. If you look closely at this extra-special Porsche GT wheel, you'll see details inside the spokes that are simply incredible. These can only be achieved using their unique 5-axis machining process. The bollocks. End of story.

www.bbs-usa.com

Sizes: 9 and 12-inch widths, 19, 20 and 2-inch diameters
PCD: Centre-lock



Center Line Convo Pro, From £245 (each)

These guys may not be able to spell the word 'centre' but that hasn't stopped them becoming one of the world's most renowned for muscle car and drag racing rims. That's why you'll find this forged 2-piece stunner available as a mental 4x15-inch, and in a whole load of crazy offsets up to ET-55! Luckily some more usable 15s are available too, and these will fit many a retro Jap motor or BMW.

www.centerlinewheels.com

Sizes: 4x15, 7x15, 8x15 and 10x15
PCDs: 5x114.3, 5x120.6
Finishes: Polished forged centre, stamped and riveted aluminium lip



THUMBS UP TYRE REPAIR KIT, FROM £30

There's no doubt that this is one of those products that every new car should come with as standard. In fact, surely everyone else should have one of these stashed away in their glovebox, too. It could save you a whole load of hassle.

This top-notch little kit comes with all the tools needed to repair small punctures in an emergency, but the best bit has to be the special inflator that uses compressed air cylinders, and means you don't have to carry a bulky compressor or, even worse, a foot pump. Smaller, lighter and quicker to sort out than a spare wheel, what's not to love about that? One-nil to the gadget freaks.

www.yingpalo.com



TYREDOG BLUETOOTH TPMS, £85

Here's another seriously cool gadget for your rubber, perhaps even the nemesis of the product above.

This next-generation tyre monitoring system works via Bluetooth to send pressure and temperature updates to your smartphone, in real time, to warn you immediately if something is amiss.

What's more, unlike just about every other system out there, you don't need to remove the wheels and tyres to get it fitted. Instead you simply screw on the valve caps and away you go.

www.josn.com.tw



BKC MOTORSPORT BMW N55 INTAKE MANIFOLD AND FUEL RAIL, £615

They don't half love a Beemer in the States. We're told it's actually their most popular European marque, and that certainly reflects in the amount of them on display at SEMA.

The list of BMW tuning parts at the show was long and distinguished too, but one that immediately caught our eye is this high-flow N55 manifold from BKC Motorsport. We definitely need more of this stuff here on our shores.

Designed to free up restrictions caused by the stock item, this puppy also uses a 'top-side' injector mounting position, both to give the optimum fuel path into the inlet ports, and to generally look all-round awesome with the matching fuel rail. A proper bit of kit.

www.bkcmotorsport.com



Asanti ABL-24 Black Label Series, From £315 (each)

Mahoesive wheels and the USA always go hand-in-hand, and the ABL-24 here is for serious arches only - they only actually make dubs and above. Still, even though they call this a 'triple 5-spoke' (and we have no idea what that's supposed to mean), we're loving the super-concave face design. Being from Asanti, you can't exactly argue with the quality either!

www.asantiwheels.com

Sizes: 9 and 10.5x20, 9 and 10.5x22

PCDs: All 5-stud

Finishes: Brushed silver or high-gloss black centres with polished lip



SSR Formula AERO MESH, From £495 (each)

These have to be some of the sexiest rims we saw all week, and that's quite the accolade when you think about how many wheels there are at SEMA! This sexyful, 3-piece AERO MESH is available in just about every offset you can imagine and there's a whole load of custom bolt options too. It's not cheap of course, but we so would.

www.ssr-wheels.com

Sizes: 7-13-inch widths, 16, 18 and 19-inch diameters

PCDs: 4x100, 5x98, 5x100, 5x114.3, 5x108-5x120

Finishes: Silver with red/blue plate



SINGLE LIFE

Pioneer singleDIN powerhouses

You don't have to compromise on a superb car stereo system just because you have the fine taste to run a car with a traditional singleDIN radio slot. Thanks to Pioneer's minimal, clean design philosophy you have the best of both function and form, without having to air-chisel a doubleDIN-sized hole in your dashboard. That said, even if you DO have a doubleDIN dash, you can still fit one of these – and fill the other slot with

extra gauges or a phone slot!

Here's our quick rundown on what's hot in the current Pioneer range – allowing all of the functionality of a modern doubleDIN within the convenience of a singleDIN chassis. As always, the smartphone now dominates and improves in-car life, so connectivity is key to entertainment, navigation, audio and video.

Once hooked up with your Apple or Android device, there's a whole new world of in-car possibilities and infotainment to explore...



DEH-X7800DAB

A next-generation CD tuner with next-level performance, the DEH-X7800DAB comes equipped with Bluetooth and USB compatibility and connects to both Apple and Android devices for seamless integration when making hands-free calls or streaming music via a 4G phone connection. High-end audio features, such as lossless FLAC compatibility, a 13-band Graphic EQ, 4x50 Watts MOSFET amplifier and Time Alignment make sure you'll get the very best sound quality from any vehicle the unit is installed in. Don't let that simple, conventional fascia and modest price fool you. This is packed with all of the modern tech to make a smart life even smarter.

Price: £149

DEH-S410DAB

For entry-level smartphone connectivity and digital radio, this really is the best of both worlds. Think that just because you only have limited space and require a 'normal' stereo fascia it will be lacking in connectivity? Think again. The DEH-S410DAB car stereo lets you enjoy the convenience of digital radio, thanks to the integrated DAB/DAB+ Digital Radio tuner, while Auto DAB Tuning makes it very easy to use. For more music playback, you can play your favourite CDs or simply hook up your iPod, iPhone, or USB stick to the front USB or Aux-in. With iPod & iPhone Direct Control and Android connectivity, you will enjoy your favourite tracks in superior sound quality, whilst still being able to charge your phone battery.

Price: £120



AVH-Z7100DAB

If singleDIN is your bag, can we recommend the sensational AVH-Z7100DAB? This all-singing, all-dancing motorised 7-inch unit sports almost all of the functionality of Pioneer's revered doubleDIN units into a handsome and sleek singleDIN chassis. It's perfect for the no-compromise petrolhead who wants to retain the good looks of an older dash without settling for second best. The 7-inch, true colour touchscreen means this unit is a joy to scroll through, while smartphone connectivity is possible via USB cable or Bluetooth and Apple CarPlay and Android Auto are also both supported. Audiophiles will also be pleased to hear about the 13-band EQ and time alignment to ensure music arrives at your ears in a perfectly coordinated way, particularly handy for making it seem as if voices and instruments are projecting from a central position as if on stage. Also Waze and Spotify are supported as third party apps, which can be controlled from the headunit itself.

Price: £699



SPEAKERS

If you've sorted the headunit – how about the speakers? Many of these will fit tastefully behind OEM grille surrounds (where fitted) for the best of both worlds. Also, if you want to keep your OEM headunit, a new set of speakers is a great way to enhance your audio system.

TS-A1600C

Upgrade your OEM sound with a simple plug-and-play component tweeter and bass solution from Pioneer. Suitable for the vast majority of front and rear installs, these 16.5cm A-series speakers rely upon carefully selected materials to improve bass response and high frequencies, whilst delivering Pioneer's famous open and smooth sound concept, all in an easy to install package. Specific models also include a custom fit adaptor for quick and easy installation.

Price: £99.95



TS-A1670F

Another sweet solution to improving a factory stereo system without having to rely upon an additional amplifier for Pioneer's famous open and smooth sound. Featuring a 3-way array of woofer, mid-range and tweeter speakers in a traditional coaxial layout it's the space saving solution you need to inject some additional aural pleasure into your motor. In conjunction with some specially made 16.5cm mounting rings you should see a huge improvement with this upgrade path over the flimsy, factory offerings.

Price: £64.99



AUTO FINESSE

PRICE: £139.35 www.autofinesse.co.uk

Caramics Complete Protection Kit

Ceramic coatings are big business nowadays. In fact, over the past few years they've taken the detailing world by storm. Many professionals offer this premium service and, if you're lucky enough to be in the market for a new motor, the dealer will be more than happy to charge you a fortune to have the paintwork sorted too.

But what's all the fuss about? The simple answer is that ceramics offer the ultimate in surface protection. Think of them as a super-advanced version of traditional waxes or sealants, with even more extreme durability, enhanced hydrophobic qualities and better UV protection. They're not just for paint either; there are specialist products designed for glass, fabrics, leather and even specific kits for alloy wheels.

Invented in Asia around a decade ago, it's the past couple of years where they have really blown up. Sometimes these are referred to as nano-coatings or glass-coats, but the basic idea is that they use silicon (or, more accurately, SiO₂ - silicon dioxide), to add a microscopic layer of glass to surfaces. This offers plenty of gloss but, much more importantly, stops dirt and grime sticking. Some pro-detailers go so far as to call these sort of products 'self-cleaning', which means that, as you drive, grime will literally slide off the surface.

The downside of all this of course, is that the technology is expensive compared to traditional finishing products and LSPs. They also require plenty of effort and experience to apply properly.

But that's exactly where Auto Finesse say their new 'Caramics' (can you see what they did there?) range is different. So, as it's that time of year where surface protection is paramount, let's have a little lookie...



In the Box...

First things first, and at the risk of sounding like one of those 'Youtuber' people, the packaging is spot-on. Before you even start, this product feels special, and that's important when you're spending your own cash. Open the box and you get... that's right, four more boxes! Everyone bangs on about paint protection of course, but here you also get a separate kit for glass, wheels and interiors. It's like a Russian doll for car nuts! Again, it's nice that they haven't skimped on the packaging here either, it would have been so easy just to lob everything in the box and let you work it out yourself. What's also great is that each kit contains absolutely everything you need, along with a comprehensive instruction booklet to make life even easier. Importantly, these are all available separately too.

When you get to the business end, using the stuff, it's clear that they've taken a different approach to many by giving the home market the bulk of the consideration. If you take the paintwork kit as an example, instead of a small bottle of product (where you have to mess about measuring out the right amount of drops onto an applicator), the coating comes in the form of ceramic resin wipes, each containing the right amount of product for a panel or so. If you can clean your hands after eating a Bargain Bucket using a KFC wipe, you know you'll be able to use these.

The same sort of wipes are in the glass kit, and both the wheel and interior coatings come in an easy-to-use spray bottle. Each kit also contains prep-wipes (or sprays) and all the applicators you'll need. They really are about as comprehensive as it gets.



Midge's Verdict

I can't help thinking that what Auto Finesse have done here is rather clever. Ceramic coatings are brilliant, there's no doubt about that, they offer the best surface protection you're ever going to get. Generally speaking though, the way in which most products have to be applied immediately makes them the reserve of professionals and the more hardcore detailing buffs. Even for experienced detailers, using a ceramic coating can be a daunting task.

What they've done with Caramics however, is really thought about making the process accessible to all. The unusual thing about this product is that it's designed for everyone from the hardcore detailing nut, right through to the beginners. In fact, it's arguably even better for those who don't particularly get all excited about cleaning their car at all, the instructions and application methods make it dead simple and, once you're done, you get all hardcore protection you'll ever need for a whole year.

Ease of application aside, the Complete Protection Kit we've got here is seriously good value, but I also love the way each smaller kit can be bought on its own, a way of making the system even more appealing. Take my TT for example, the vinyl wrap means I won't really need the paint protection, so I'd be more inclined to go for the wheel, glass and interior systems. Having to pay extra for a paint kit may have put me off. Some might prefer to just coat their wheels or interior, others might only be interested in their paint, so having the whole range available separately gives a good degree of versatility.

Most of all though, it's almost impossible to mess these up. The only way they could have made Caramics any easier to use is if they popped around your house and whacked it on themselves. An epic product, and just in time for winter too.

In a nutshell: Easier than I thought, professional results, ideal for this time of year.





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Interior



Designs

It's what's on the inside that counts...

Although the aesthetics of your car are important, it doesn't take a rocket scientist to work out that most of our time is spent sitting on the inside. And just like in the property industry, there's an abundance of design specialists around the world that can take your interior to the next level.

This is even more of interest today as manufacturers face a constant battle with conflicting government legislations. On one hand vehicles have to pass strict safety tests (a good thing, obviously). But on the other, they have to comply with equally tough emission laws. What has this got to do with the interiors of our cars? Safety devices are heavy, and

weight is the enemy of emissions. The compromise? Lighter components and this means everything from the metals your car is made from, to the materials used for the interiors. As such, leathers and fabrics have become thinner; this saves weight but compromises longevity and the quality of your interior. The likelihood is that you'll be requiring a retrim. Good news...

The aftermarket upholstery market is booming and there's even been a growth in companies that solely exist to offer upgrade options for your car, as well as trimmers that specialise in bespoke and luxury interiors. But before you book your car in for a retrim, here's what you need to know...

Materials

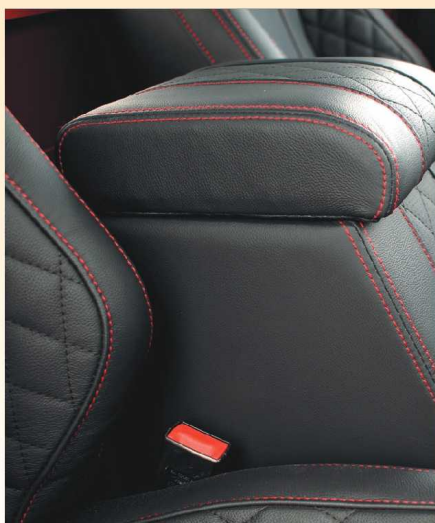
You might think the main decision you'll be making when opting for a retrim is the colour and material, but there are sub categories within these areas. And we're not just talking about the quality.

Leather will be the most popular option for most, but it's not as simple as picking a colour. You also need to pick the type of leather. The most popular in the automotive market are full grain, corrected grain and nappa. You also have to take in to account the dyeing and drying process.

We'd always recommend hung-dried leathers over artificially dried options. This is because moisture is lost from the leather in the tumble drying process, which isn't ideal as leather relies on its natural moistures to keep it supple.

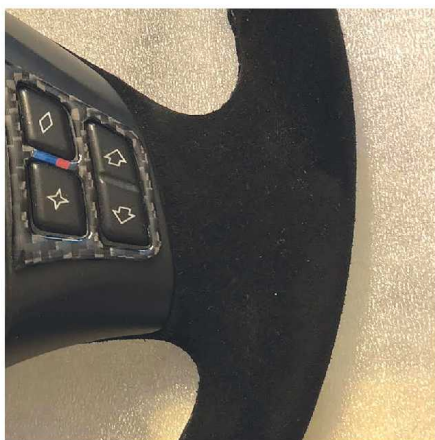


TYPES OF LEATHER



Full Grain ▲

The best quality hides have not been sanded, buffed or snuffed. It's usually the most expensive leather, but regarded as the best.



Suede ▲

Suede is made from the underside of the leather skin that has a shaggy nap. It provides a different texture to smooth leathers but isn't good in heavy wearing areas as it 'shines up'.



Corrected Grain ▲

This is a Top Grain leather that had too many natural blemishes. These blemishes are 'corrected' by having the surface grain partially removed to get rid of the natural hallmarks. The grain is then embossed with a consistent graining pattern.



Nappa ▲

You would have heard of this term as it's used by manufacturers to make their interior sound more exclusive or luxurious. But this isn't necessarily the case. Nappa is a generic term used to describe the leather's soft feel. It's normally derived from corrected hides but can also be full grain.



Perforated ▲

Perforated leathers were first introduced purely for aesthetics. We still think they look great, but they now have scientifically based advantages. One key benefit is ventilation. Many modern-day seats have fans and heaters built in and perforated leather helps disperse the air.

The type of perforation has changed too. Originally offered in the diamond shape, there are now lots of other shapes available including star, square, circular and cross, all with different frequency and patterns. The perforated materials aren't exclusive to leather either.

Leather Cost

To retrim two front seats and a rear bench seat you're going to need around three hides. An average hide is 5.5m and a reasonable quality leather will set you back around £35sqm. We'll let you do the maths on that one.

OTHER MATERIALS



Vinyl ▲

This isn't real leather, but instead made from polyurethane. It became popular with manufacturers in the later noughties because of its cheaper manufacturing costs. Being a man-made material means production is quicker and less expensive than a natural farmed leather. If you're on a budget it's a great alternative, but vinyl fades and doesn't wear very well. That's why so many modern-day interiors just don't last like they used to. So we'd steer clear of it if you're looking for longevity.



Alcantara ▲

Alcantara is actually a brand name, so be wary of people saying they have an Alcantara interior when in fact they might have a cheaper alternative. It's a high-end product that looks fantastic but comes with a premium price tag (£80 a metre). There are other cheaper alternatives out there, like Dinamica, if you want the look without the premium cost.



Fabric ▲

A lot of people overlook having their interior reupholstered in fabric. It's the best option for maintenance, longevity and price. There are tons of options out there, too. Just because it isn't leather doesn't mean it can't have a premium feel. Manufacturers are constantly bringing new materials to the table. So if you've seen it and like it, you'll be able to have it.

STITCHING

Believe it or not, this is where you can get really creative and take your interior to the next level. We're not just talking about the colour and thickness of the thread, but about the execution. Here are some examples supplied by d:class automotive...



Single Stitch ▲

Exactly what it says on the tin.



Twin Needle ▲

This is where two stitches run parallel with each other. Used to French-seam two panels together.



Ornamental ▲

This basically applies to all types of decorative stitching.



PATTERNS

This is one of the best ways to make your interior stand out from the crowd and has become hugely popular over the last 15 years. You would no doubt have seen quilted leather seats in high-end exotica. It's traditionally one of the more expensive techniques too, as many patterns have to be hand stencilled and stitched, making them labour intensive and therefore expensive. But there's good news. CNC stitching machines have moved the boundaries, complicated patterns that would take days of labour can now be done in a matter of minutes. The only limitation now is your imagination.

LIGHTING ▼

Again, advantages in technology have changed the game here. LED lighting can be used to create different effects and add an ambience to your interior. What about a starlight roof lining? Anything is possible here. We've even seen LED piping.



THE FUTURE ▲

We can only see interior getting more and more futuristic as new materials are developed, material embossing is getting more popular and intricate CNC stitched patterns will increase.

Seats will become more streamlined as traditional foam padding will eventually give way to technological advances like 3D spacer fabrics. These fabrics are already being used by Range Rover in their seats and have unparalleled advantages compared to foam. They are lighter, cheaper, more environmentally friendly, have elastic schedule (memory) and are breathable.

LUCARI DESIGN ▼►

The Ford Mustang is one of the most iconic muscle cars in the world, and while its performance figures and rumbling V8 have given the car legend status, less can be said of the stock interior. But Lucari Design have changed all that. You can now have iconic Mustang status and luxury comforts, as they offer a number of packages to overhaul or upgrade the interior (they also offer exterior packages, too). These replace the false leather on OE vehicles for top grade, diamond quilted leather. Not to mention the Lucari Design flat-bottom steering wheel that's finished in Alcantara and nappa leather.



EDGE AUTOMOTIVE

Edge Automotive's Stephen Palmer discusses some trimming FAQs...

Q) Does it make a difference to the cost of the retrim if you have a patterned centre?

A) Yes. There is a lot more work involved in adding patterns to the centres of seats, to the point it goes beyond just sewing diamonds on. When there are two patterned panels that join, we take the time to work the difference out. So the pattern seamlessly carries on throughout the different panels. We have a few different approaches to adding patterns to panels. Each incur different costs depending on complexity. We can 'quilt' a pattern into the material, whether that's diamonds, hexagons or squares. We can also laser etch the material. Any design can be etched into the material.

Q) What's the hardest part of an interior to retrim?

A) Nothing is easy when it comes to crafting interiors. Every car has its challenges. But I'd say the hardest part would be patterning and trimming dashboards.

Q) What style would you recommend for a futuristic looking interior?

A) When it comes to futuristic aesthetics my first thought is minimalistic. I would avoid any kind of quilted pattern stitched into the material. Diamonds and so on, as they've become a bit dated now. Adding a striking colour would lift certain details of the interior. Not excessively used though, keeping with the minimalistic feel.

Q) What kind of money would I need to budget for a full retrim, including doorcards, dash and interior plastics?

A) There are a lot of variables to consider if a pattern is requested, such as the grade of leather, the incorporation of logos and, the biggest factor, the size of the car. The best thing to do is to contact us and discuss your project with us directly.

MAINTENANCE

Leather is a natural product and needs maintenance and, just like our own skin benefits from moisturisers, so do interior leathers! There's no need to steal your missus's Dior Hydra Life cream and start rubbing it into your seats though, as Gtechniq have scientifically developed a bunch of leather cleaners and conditioners for this exact purpose...

I2 Tri-Clean, £12.98 (500ml)

Gtechniq, the name behind high-tech paint protection and car care products, has teamed up with BioCote® leaders in antimicrobial technology, to create I2 Tri-Clean, an interior cleaner that kills bacteria, and neutralises odours.

I2 is a powerful pH neutral cleaner with deep cleansing properties. There is no need to use water, simply spray on a surface and wipe until the area is clean.

With added BioCote® antibacterial technology, the cleaner kills 99.9-percent of bacteria, ensuring surfaces remain hygienic and fresh, actively reducing the number of microbes present. Ingredients in I2 Tri-Clean include a true odour absorber, not an odour mask, which eliminates tacky residues that attract dirt.

C6 Matte Dash AB, £7.25 (100ml)

C6 Matte Dash is specifically designed to protect dashboard and door card materials including vinyl, plastics and rubberised finishes.

The coating adds abrasion resistance and UV protection to treated surfaces. And with added BioCote® antimicrobial technology, the treated surfaces will be hygienic and fresh.

C6 will not affect the gloss of your car's trim and leaves a natural feel.

L1 Leather Guard, £7.25 (100ml)

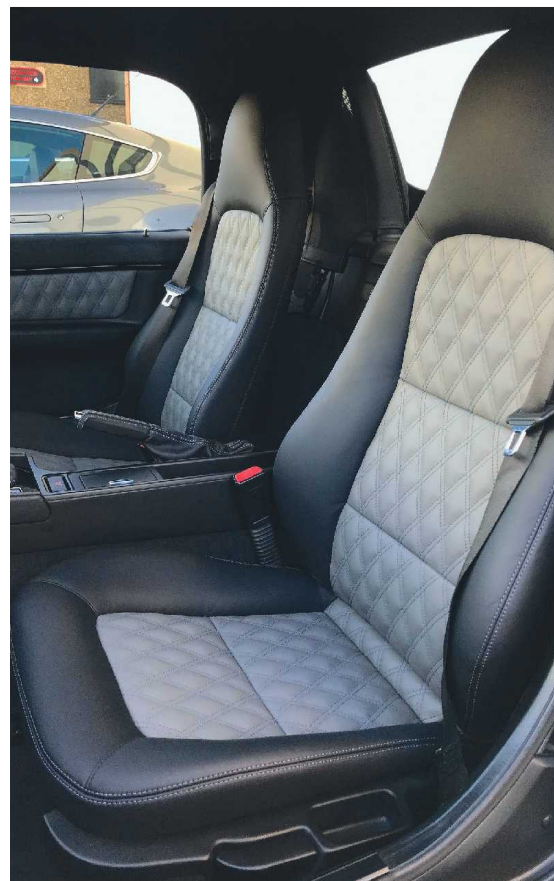
L1 Leather Guard AB forms an abrasion resistant matte finish which offers the best protection against UV rays, dye transfer and discolouration. This product also contains BioCote® antimicrobial technology. L1 is ideal protection for seats - particularly bolsters, steering wheels, and high-wear leather areas. It will give three to 12 months durability depending on how high-wear the area protected is.

I1 Smart Fabric, £16.00 (500ml)

I1 Smart Fabric leaves no remnants of a spillage and moisture simply falls off a coated surface. Laboratory testing reveals that I1 V2 repels water to the highest standard set by the American Association of Textile Chemists and Colorists (AATCC) – ISO 5. I1 Smart Fabric is available with or without BioCote® antimicrobial technology.

The technology behind I1 Smart Fabric makes ordinary fabrics waterproof and easy to clean. It can be used to prevent soaking, swelling or rotting on any fabric.

Nano particles that make up I1 Smart Fabric coat each fabric fibre individually, leaving the texture unaffected, allowing the material to breathe. This means stale air will still be able to escape, while repelling water and oil-based liquids.



d:class

We'd like to thank the team at d:class Automotive for their time and assistance in compiling this feature. d:class are one of the most renowned and well respected automotive trimmers in the UK and work with a number of prestigious brands to develop their interior needs, including the likes of McLaren, Nissan and Noble.

CONTACTS

Lucari Design.....
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Edge Automotive.....
www.edgeautomotive.co.uk
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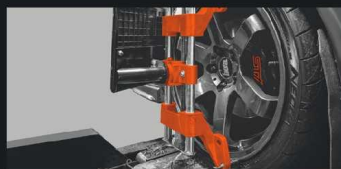
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Coilovers, dampers, springs



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TA TECHNIX



Long Term Lupo

Pat Roddy isn't in it for the short haul - he's spent four years getting his GTI on point





*"I'm a reserved person. But I just stood there thinking, 'F*ck that looks good!'"*

Gravity, July 2018. There's a little Volkswagen on the Airtisan stand and its collecting stares from all over.

Glittering in Audi Merlin Purple, dropped hard over OZ Futuras and boasting a deliciously extra boot build, complete with a pair of carbon fibre air tanks, this Lupo is fully lit. Add in the Polo G60 front brakes, Mk5 Golf GTI front seats and a Rockford 12-inch subwoofer and it's obvious the owner takes every element of his miniature GTI seriously.

This is one thought-through build, the product of four years' graft by owner Patrick Roddy and his friend, Airtisan founder Ryan Castleman.

Pat's Lupo love goes back even further, thanks to the standard 2001 1.0E he bought as his first car. It didn't stay standard long. He had plans. Taking inspiration from de-seamed classic Minis and the Euro Smooth scene, Pat skimmed the front bumper and indicators, dropping the lights into the foglights, deleted the side repeaters and fitted a downscaled aerial and mirrors. BBS RX2 alloys and a MOMO 280mm steering wheel completed the look.

Two years on the show scene saw the pair grow closer, but nothing was going to keep Pat from his ultimate goal: a range-topping GTI. "I'd wanted one since I first passed my test," he smiles. "But I just couldn't afford one back then."

By early 2014, his finances were looking favourable and the search began. Casting his eyes nationwide, he finally settled on a black 2001 example that was up for sale in Portsmouth. Boasting heated leather seats, a sunroof and less than 60,000 miles, the car's spec was irresistible. "It was really well looked after," Pat continues. "And then I ruined it..."

The change really was that abrupt. AP Racing lowering coils, VW Polo G60 front discs, Ferodo DS2500 brake pads and partial polybushing arrived just a week into ownership, before Pat introduced the GTI to the daily grind. He was happy. But one question kept eating at his mind: what if he could make it lower?

Working with a friend, and using his driveway as a makeshift workshop, Pat soon found out. Together, the pair used a selection of Air Lift parts – including Mk2 Golf front struts, a set of rear bags and the

V2 management system – to convert the Lupo to air ride. Four days later, freshly equipped with the ability to sit arch-to-lip at three corners, the GTI was back on the commute.

Another six months passed and the time had come to elevate the Lupo to show car status. Focused on improving the car's blemished bodywork, Pat dropped the GTI at Body and Tuning in Mansfield, with instructions to smooth the front bumper, shorten the rear recess, add a Mk6 Golf boot release, roll and flare the wheelarches. As a finishing touch, the VW was also down to receive a respray.

Pat just had to choose the colour. "I was going to keep it black with a little bit of a twist," he explains. "Something like purple-tinged Ford Panther Black. Ryan's partner Amber convinced me to go with the purple I really wanted, though." Sparkling in Audi Merlin Purple, the Lupo stands testament to just how right her advice was.

Keen to showcase his refreshed Volkswagen, Pat wasted no time in attending Ultimate Dubs, Early Edition and Wörthersee. Things were looking great. Then the clutch let out. Six months later, Pat

ACCURAR
SUSPENSION

Amazing, this car also
includes an engine

Daily driver...?

Before Pat could release the Lupo into the wild world of the full-time show car, he had to find a daily driver to replace the VW. You know, something routine and unassuming. A standard, black, diesel powered Audi A1 seemed like the perfect choice. And it was, right up until the day Ryan started whispering in his ear. Seven months later, the Audi wore a full air-ride system and colossal, bright pink Cast13 alloys. That's just what happens when your best mate runs an air suspension firm...

16-inch OZ Futuras

THIS ONE'S MINE

Owner: Pat Roddy

What do you do Pat? I'm a production manager at Rolls-Royce – I actually trained Matt with the Bippu C Class from a couple of issues back!

You've had a big windfall – what do you buy? It'd have to be an old whaletail Porsche.

We love the Lupo, but what's your ultimate project? A classic Mini with a VTEC swap, definitely.



HOT RIDE: Lupo GTI



and Ryan finally returned to the car. Top of the list was the clutch and minor engine mods, followed by further paintwork, including an engine bay and interior spray. Last, but by no means least, Ryan was to strip out the original air ride and rebuild the system with Air Lift Mk2 Golf front struts, Airtisan Ultralow rear bags, AccuAir eLevel management, an AccuAir ENDO-CVT tank and a custom boot build.

The pair set DubShed 2017 as their deadline, yet work commitments left them with only one week to rebuild the car. They pulled 20-hour days, but it wasn't quite enough. "We were finally about to leave," Pat grimaces, "but the tracking was so far out it kept chucking itself down the road." Pat and Ryan couldn't bear to look at the Lupo any longer.

The seemingly incompletable project spent the next nine months in exile.

May 2018 arrived and the Volkswagen finally returned to the workshop. Gravity was the new deadline.

The pair stripped back the interior, then Ryan was given complete freedom to install the uprated audio system and refresh the boot build. "He wouldn't tell me what he was doing," says Pat. "The only input I got was the raised centre section and the stripe in the Alcantara. It's so cool to see what you get when you let Ryan just crack on."

With twin carbon fibre supplementary tanks and a boot-mounted Rockford sub, the result is unapologetic show car jewellery.

After three weeks of work, Pat was finally allowed to see the result. "I'm a reserved person," he smiles. "But I just stood there thinking, 'F*ck that looks good!' It's exactly what I wanted when we started."

One week to go and completion was tantalisingly close. Then Pat took a closer

look at the OZ Racing wheels he'd been running on Lupos since 2013. Finished in gloss white and built up from a retro Mercedes base, they framed the bodywork perfectly but there was a problem: they were too badly buckled to ever be effectively restored. Crestfallen but determined not to miss the 2018 show season, Pat immediately jumped online to find some suitable replacements. Later the same day, he ordered a set of 16 inch OZ Futuras.

The issue was only half solved, however. Before the new wheels could set the Lupo rolling, they had to be brought up to show-ready condition. There was only one man for the job: Dan Taylor, owner of Wheel Unique. With seven days to work, the Yorkshire split-wheel specialist had a challenge ahead of him. The faces and barrels needed media blasting and

Turn it up to 11!



Boot-mounted Rockford sub #boom





An iPad mounted in the dash

TECH SPEC: '01 VW LUPO GTI

STYLING

Lupo GTI bodysell with full repaint in Audi Merlin Purple; smoothed front bumper; shortened rear recess; VW Mk6 Golf boot handle integrated in Volkswagen badge; smoothed rear spoiler; front and rear arches rolled and flared.

CHASSIS OZ

Futura alloys 8x16in front and 8.5x16in rear; fully rebuilt with Radinox lips and Audi Nardo Grey powdercoating by Wheel Unique; Air Lift VW Mk2 Golf front struts with Airtisan custom top mount; Airtisan Ultralow rear bags; Powerflex bushing throughout; AccuAir ENDO-CVT tank, twin carbon fibre supplementary tanks; polished hardlines; AccuAir eLevel control system.

INTERIOR

VW Mk5 Golf GTI front seats; renewed and extended sound deadening throughout; Apple iPad mounted in dashboard.

AUDIO

Audison bit Ten; Hertz speakers throughout with 12in Rockford sub woofer.

TUNING

CBA air intake system; decatted four-to-one exhaust manifold; custom exhaust centre section and back box; VW Polo G60 front brake discs and callipers.

THANKS TO

Ryan, because he's done literally everything and anything I've wanted; Dan at Wheel Unique; and the rest of the lads for chipping in whatever else for it.

powdercoating; the corroded outer lips had to be replaced and mirror polished; and the wheels required rebuilding with new bolts.

It was a close run thing. Supply delays slowed the process and Dan was still constructing the alloys when Pat came to collect them. Nevertheless, the deadline had been met and the fresh OZs, complete with Audi Nardo Grey faces and Radinox outer lips, speak for themselves. "He pulled it out the bag there," says Pat, clearly appreciative of Dan's commitment to absolute punctuality. "He's a wizard at what he does." Two years after its last show appearance, the Lupo would make it to Gravity.

Flush and fine the GTI might be but Pat won't call the Lupo project complete just yet. "I don't think I can ever be happy with it," he says. "There are things that wind me

up, like the rear not sitting arch to lip like I want it to." Some off-season fettling with spacers, camber and wheel sizing will hopefully sort that little issue, before Pat and Ryan switch to the project's next stage.

Their plans are substantial. The pair aim to revolutionise the interior and engine bay in time for the 2019 season. "Oh, we've got loads in store," Pat smiles. "We've got replacement interior panels for every section, which will be finished in alcantara. We're going to retrim the dash and I want to change the seats too."

A driveline swap, ideally to a TFSI unit with a DSG double-clutch transmission, but more likely to be the ever popular EA113, will complete the winter's work.

With goals like those, this Lupo's lore has many chapters left to run. **FL**





AHOY 100% TUNING

WE HEAD TO ROTTERDAM TO CHECK OUT WHAT THOSE CRAZY EUROPEANS HAVE BEEN UP TO

There aren't enough car shows with hilarious names. Imagine how much more entertaining it would be if you were cruising in your freshly buffed pride-and-joy down to an event called Yoohoo Darling, or Wassuuuup, or Hey You There Behind The Bushes. There's Straight Outta Kempton, of course, which is pretty clever... but if you want a really comical show name (and something in your brain makes you hesitant to go for the questionably-titled Raceism in Poland) then you need to turn to the Netherlands – and, specifically, Ahoy Tuning.

Things get slightly less hilarious when you realise that Ahoy is actually the name of the convention centre where the event is held, but your sensibilities will be suitably mollified by the staggering array of cars on display at 100% Auto Live – which is what the show's actually called. It's one of Europe's biggest events for modded cars, stretching over numerous colossal indoor halls, and it's been building in stature over the years to become the place to be seen with the coolest projects on the scene; enthusiasts come from all over Europe and beyond to get their cars under those bright lights – so naturally we had to be

there to soak up the atmos and see what you guys have been road-trippin' across the continent in. Quality is guaranteed owing to the fact that each hall's displays are hand-picked by a panel of experts to represent the best in modifying from each country in the Union – you'll find VAG and Euro builds grouped together, JDM stuff elsewhere, American rides in yet another avenue, and so on and so on, and there's even a Nankang-sponsored action arena to ensure that the go matches the show. It's an essential event on the show calendar, so we turned up with a snapper and captured the essence for you...



Mk3 Escort

Micha Will's shiny silver Mk3 is a classic example of German retro modding – classic ideas and materials, brought bang-up-to-date, and flawlessly finished. Impressively that's the original paint on the outside, and the engine bay and interior have been spruced up to match. What may look like a modern arch kit is actually a period-correct Ford Motorsport-option wheelarch/spoiler combo, and he's got it sitting pretty on RS1600i suspension with custom coilovers to get the thing right on the floor. It's pretty hardcore under the bonnet too – the CVH has a finned RS1600i cam cover, pocketed 1300 pistons, Kent race cams, and twin 45 Weber carbs. Fruity.



Plush Porker

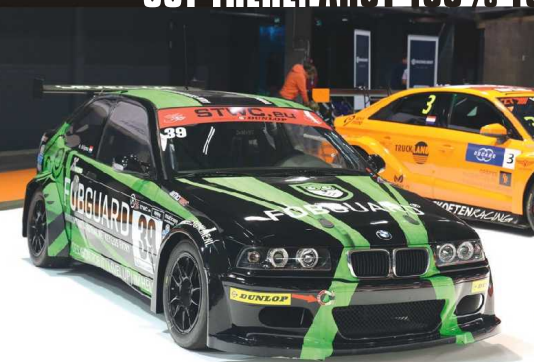


OUT THERE: AHoy 100% TUNING

Wide-arch Polo

We love Curtis Hughes' Polo, just because it annoys people. When this rolled onto the show scene in 2017, complete with gloss black mirror-shine paint and colossal custom overfenders, the internet all but shut down due to the venomous bile spewed by 90-percent of the people commenting on the many, many photos of it that immediately began circulating. And as if to further irritate everyone, it was back for the 2018 season in a bright banana shade of f*ck-you yellow. Because why not?

Yes, it's driveable – in fact he drives it to Wörthersee and all sorts. Yes, you can still open the filler cap, it's meant to be like that. And no, he doesn't care if you don't like it.

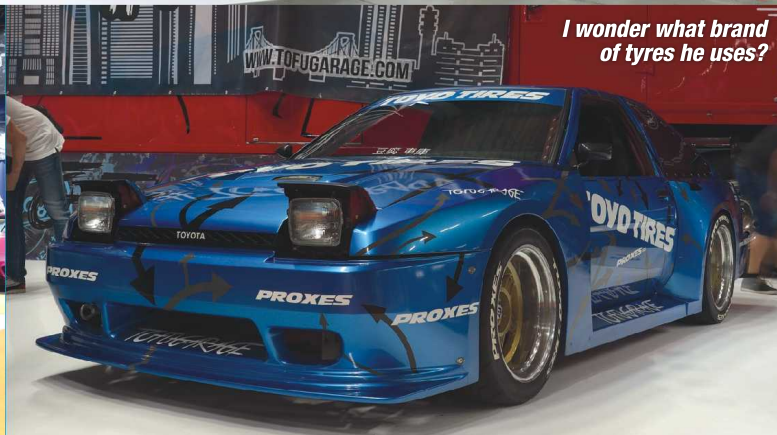
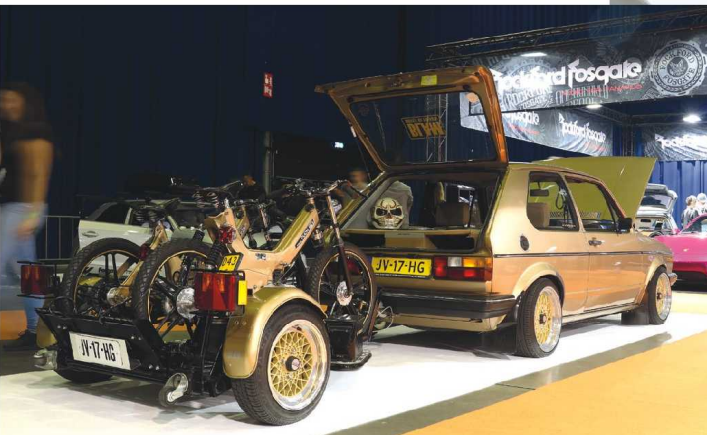


Max Verstappen turned up in his BMW



We're loving this military green S2K





I wonder what brand of tyres he uses?



We like tofu and we like Skylines. Double win

Tofu Garage Skylines

Tofu Garage build all sorts of noisy things in their HQ just outside of Dortmund – drift cars, show cars, things that fuse the two; retros, moderns, as long as it's JDM and badass then anything goes. Among the various cool cars they brought along to Ahoy were a couple of stone-cold Skylines – the first, belonging to Tofu founder Alex Biscayne, was a Rocket Bunny Pandem R32, which was so magnificently wide that we were impressed he even managed to fit it into the building. And slightly more subtle, but only in relative terms, was shop manager Markus's R33 GTS-T, which is proud of its non-GT-R status rather than being some sort of replica. A really sweet pairing – perhaps we can convince them to put together an R34 and R35 for next year....?



OUT THERE: AHoy 100% TUNING

No wonder their deliveries are always on time



Wowza. What a beaut of a PS13



Sweat fitment on this E36 cab

It's two thumbs up for Petra Antoinette's Lupo GTi from us



Lupo GTi

Petra Antoinette's perky little Lupo ticks a lot of boxes for us. For starters it's bagged, and that's a very good thing indeed for dinky little cars like this, they look best on the floor. It's also Nardo Grey, which is so on-trend that we've had Gok Wan on the blower begging for swatches. And finally, it's got a really awesome wrap – we've been talking a lot about race car wraps recently, and Petra's is a properly offbeat execution: possibly the first Lightning McQueen livery we've seen which doesn't look cheesy or jokey, thanks to the fact that she's reworked it in black and grey to match the Nardo paint and black Japan Racing wheels. Top effort, we like.



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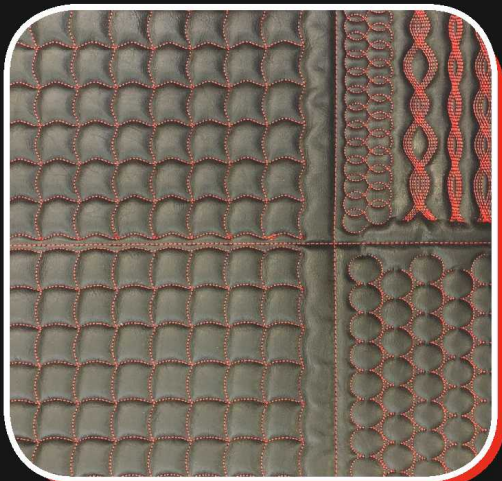
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PANDEMONIUM

Kei Miura's wide-arched bodykits divide opinion. Not ours. We love his work...

Has Kei Miura's assault on the tuning world ended? Has his trademark overfender conversion reached an end? There's no doubting the fact that for every car he pens a kit for, he's subjected to as much love as he is hate. A wise man once said, 'You can please some people some of the time, but you can't please all the people all of the time'.

Yes, ladies and gentleman, the opinionated car public needs to stop getting upset at anything that remotely tackles their assumed tastes and just go with the flow. What could possibly be wrong with taking an ageing car, cleaning it up and pumping its appearance into something like this, Miura's own EG Civic.



HOT RIDE: CIVIC EG



His Civic kit has been around for over a year now. We aren't concerned on the freshness of it all, but rather on what the man behind Rocket Bunny – now Pandem – plans for the car. Back at Tokyo Auto Salon this past January, the idea was to build up the engine into something pretty crazy and take the car to Germany to compete in a hill climb race. The car is a fusion, an evolution of the little EF Civic that wore the TRA Kyoto colours two decades back, Miura's Kanjo racer that for years he used to terrorise Osaka's inner motorway loop with. The EG builds on that idea, but brings it into a modern day take. It doesn't forfeit the spirit behind it, but presents it in a more relevant interpretation.

Hence the pumped body. The conversion is one that doesn't disrupt the base car's flow. This is something Miura is very good at. He takes the underlying lines, curves and creases and extends, blisters and enhances them to create something that always seems to be pleasing to the eye. There's plenty of aggression and with bolted-on kits with exposed screws or rivets that will always be the case. But the way the redesigned front bumper seamlessly merges

into the boxy front overfenders seems to create a balance that just works. It's then all extended to the rear. The treatment to the rear guards even more of an element that stands out, as it just sprouts up from nothing into a big, angular addition. It's as if the little Civic has spent the last year at the gym, fuelled by nothing but a concentrated diet of steroids.

Skirt overlays, again fixed to the body by exposed screws create the front to rear balance that just seems to connect it all together. Little rear bumper spats give the stop bumper that little touch it needed to match to the rest of the car.

And then of course, we have the roof spoiler. Was it just the centre FRP part, we'd just describe it as something visually massive, possibly inspired from Kaido Racers. With the additional side canards that graft themselves onto the side of the car, it's plain bonkers, testament that Miura is indeed taking this hill climb thing seriously.

The contrasting FRP canards match what has also been added around the front bumper and the wheels, a set of white 16-inch TE37Vs, the perfect addition for a performance-oriented build. The Toyo Tires R888R semis are the proverbial cherry on the top, especially with the yellow lettering along the sidewall.

Swing open the drivers' side door and it instantly becomes obvious this build has been thoroughly thought-through. The entire cabin has been stripped to the bare metal and only a single Pandem bucket sits in the expanse of white that meets the eye. A roll cage has been thrown in to boost both torsional rigidity and safety, while we do like the extended shift leaver set up and the Pandem door pulls. A soft suede Nardi steering wheel finishes the treatment, while a quick glance at what was once the boot space reveals the air set-up, there to inflate and deflate the air cups mounted on the adjustable Pandem coilovers. This might be a performance-oriented build, but being a Miura creation it's gotta have the ability to look its best when sitting there static! Airing out the cups certainly aided in getting some sick static shots of the car.

So what's this car hiding in the engine department? The big GRReddy front mount intercooler might hint at something pretty hearty, but the truth is the stock B16A is still there, in its naturally

Stock B16A under the bonnet





The entire cabin has been stripped to bare metal, bar a single Pandem bucket



"The car is the evolution of the EF Civic that wore the TRA Kyoto colours two decades ago"

ENGINE

B16A; race radiator; Pandem exhaust system.

SUSPENSION

Pandem adjustable coilovers; air cups front and rear with auxiliary compressor and air tank.

WHEELS & TYRES

RAYS TE37V 16inx7J front & back; Toyo Tires R888R 205/55R16 front and back.

EXTERIOR

Full Pandem aero conversion: front bumper, front and rear wide fender panels, side skirts, rear bumper finisher, roof spoiler with side wing extension and canards, front carbon spoiler, carbon front canards.

INTERIOR

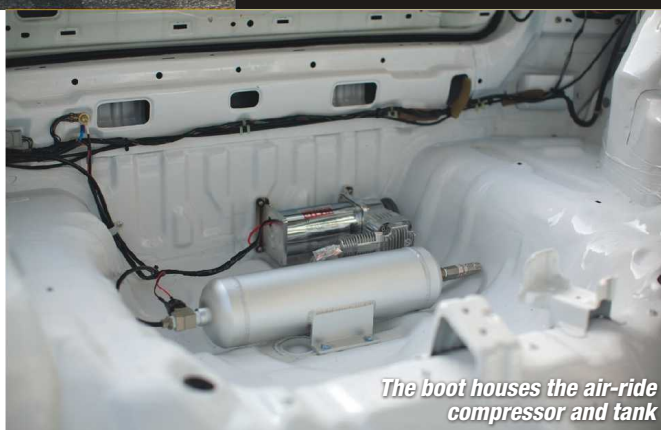
Pandem bucket seat, Pandem race harness, Pandem door pulls, Pandem window net, Nardi alcantara steering wheel.

The idea was to take the car to Germany to compete in a hill climb

aspirated form. There's a Pandem exhaust system to aid in the sound side of things, while a big radiator helps it stay cool in any driving condition. Miura hasn't gotten to this part quite yet. The plan is to dump the 1.6L set-up and swap in a 2-litre unit along with a turbocharger and shoot for upwards of 400bhp. This isn't a dream. It will happen. And Miura has even thought about the transmission he'd like to use, a Quaife six-speed sequential, just to make sure all that performance is accessed as effortlessly as possible.

The question is, when will he have time to get it done? The sheer number of projects the man brings to fruition each year is mindboggling, so his pet projects often need to be put on the backburner. But he's a man of his word...

We'll make sure we head out to the Kanjo on one of his maiden voyages once it's all done! **FC**



The boot houses the air-ride compressor and tank

"It's as if the Civic has spent the last year at the gym, fuelled by steroids"



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READY PLAYER ONE

Balancing work and play can be tricky. But if you're like Max Marshall and making fast cars faster is your bread and butter, there's no need to compromise...





Sometimes when we talk to feature car owners, there's one key phrase that really sticks in the mind, serving to characterise the whole thinking behind the project. When speaking to Max Marshall, director of MMR Performance, about the company's rather aggressive BMW 1M project demonstrator, such a phrase presents itself: "We're just about to fit the 16th set of rear tyres in 20,000 miles."

Any suspicion that this is a trailer queen which gets wheeled about to events to show off its shiny parts is blown out of the water by that one simple sentence. This thing gets used, and used hard.

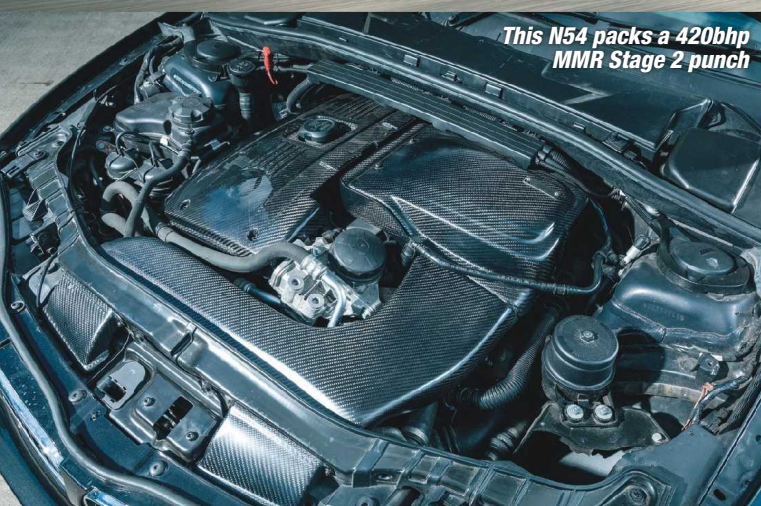
The fact that MMR chose a 1M as a base is interesting in itself, as this niche M-car is an obscure little thing. You see, back when the fresh new 1 Series was launched in 2004, the bean counters clearly hadn't envisaged a halo performance variant in the vein of the M3, M5, et al, as the M1 name had already been taken back in the seventies (remember that wedgy supercar that was meant to be built by Lamborghini but then wasn't – it was the first M car).

So there were presumably one or two scratched heads in the product planning meetings, with clearly many forms to fill out and

pencils to sharpen and what have you, but by late 2010 BMW were ready to announce a bona fide M-developed variant of the 1 Series, which would go by the natty name 1 Series M Coupé. Tricky, as it didn't quite fit in with the M naming structure. But then they couldn't have people confusing it with a 1970s supercar, could they?

Don't lose any sleep over it though, as everyone just calls it '1M' now. So what exactly was the 1M? Well, it was a car originally limited to a global production run of 2,700. But people seemed to quite like it, so when production ended in 2012 they'd sold 6,309.

The principle was simple: take an E82 coupé shell and significantly widen the track. Bulk out the wings to match, and shove on a set of wide, staggered 19-inch wheels. Throw in a tweaked version of the proven N54 twin-turbo motor (OK, an M car would normally have a bespoke engine rather than a reworked unit from elsewhere in the model range, but let's not split hairs), and bolt it to the only true transmission to appeal to the discerning petrolhead: a six-speed manual with an LSD out back. Paint it in a fashion-forward shade and the job's a good 'un.



This N54 packs a 420bhp MMR Stage 2 punch

be mainstream tolerances and compromises to iron out. And just look at the thing. It's mean, isn't it? At first glance it appears close to stock (ish). But the more you look, the more you can see it's been tweaked for maximum attack. Particularly when Max screams past you sideways with the hammer down, bonfiring the rears and laughing like a demented hyena.

The fact the 1M is quite rare means it's a fairly mad thing to run as a tuner demo anyway, does it not? The pool of potential buyers is always going to be pretty small. Ah, but that's where Max has been clever: "Although I wouldn't say there's a huge market for tuning 1Ms due to the limited number that were produced, many of the parts carry across to the E-series 135i/335i and so on, so it was still worth developing parts to fill the gaps in what we were lacking for our car," he explains. "These upgrades also complement the other

The plan worked too, as the 1M has become a genuinely sought-after, aspirational model. Its limited-run status – there were just 450 built for the UK market – meaning as many are being bought for investment purposes as are out having their necks wrung on road and track.

Its £40k retail price made it expensive for a 1 Series, but really quite cheap compared to a Porsche Cayman S, which it could happily run rings around in the right hands. 335bhp was pretty handy in a car that weighed just 1,495kg, allowing it to hit 60 in 4.8 seconds. And you got all sorts of fun toys, like the MDM button (for the stability and traction systems) and the M button (for throttle response). Gamified, next-gen stuff.

What's also interesting to note is that MMR didn't actually choose a 1M as a company demonstrator at all. This is Max's own car, which he purchased for his personal collection and had absolutely no intention of modifying. "But having a BMW tuning company and knowing the potential of the N54 engine and the 1M platform, it was only a matter of time before it started," he grins. "The more heavily involved I've become with the BMW tuning, the more likely this was to happen. I never plan to sell it anyway, so I just decided not to worry about its resale value."

Admirable sentiment indeed, and it's allowed Max the freedom to stretch the 1M's potential way beyond its already formidable factory spec. After all, with even the most capable production car, there will



19in OEM wheels plus Michelin Pilot Super Sport tyres



*Like The Beatles (kinda)
said: happiness is two
warm guns*



*M Performance
buckets*



*M Performance steering wheel,
display and rev counter*



*Alcon brakes with MMR braided
lines, add real bite on track*




BMW parts we have in development or on the shelves; intercoolers, charge pipes, and so on. So we've spent many hours testing and comparing our products on our own car in day-to-day environments and on the track.

"It was a fairly logical build," he continues, "and it helps sharing the suspension with the E92 M3. Bits have just been added as and when parts have been available, or depending what shows the car has been to – and which of our suppliers have wanted to use it for testing!"

The latest upgrade is the Alcon brakes, featuring forged callipers (6-pot front, 4-pot rear) which work in conjunction with MMR's own braided lines, for real bite on track. The suspension is upgraded with Bilstein B8 dampers and Eibach Pro Kit springs, a forthright and considered pairing in a world of off-the-shelf coilover options, and Eibach also provided the thicker anti-roll bars.

In terms of power, that shiny new carbon fibre engine cover hides a host of well thought-out tweaks to the brutal N54. Here it's been massaged by MMR's Stage 2 software, along with an MMR intercooler and charge pipes, an Arma/Pipercross V1 carbon fibre intake system, and a valved Akrapovic exhaust with decat downpipes which makes all the right noises. The upshot of all of this is somewhere in the region of 420bhp, which tells you why Max is smiling quite so widely.

"All of the work was done at 'The Power House' – MMR HQ at Bruntingthorpe," he says. Yep, their headquarters has a former US air base as its proving ground, which explains a few things. "The 1M gets used at a lot of track events at Bruntingthorpe, like VMAX and so on, and it's been on a few road trips to Le Mans, Cannonball Ireland and suchlike. I plan to use it on more track days."

And that sums up the point of this car. OK, it's ostensibly a demo piece for MMR Performance, but in reality it's just a project car for a true-blue petrolhead which just also happens to have a little work to do on the PR circuit. Max may have bought this with the idea of keeping it stock and pampering it, but that was never going to fly. With his company's know-how, coupled with his heavy right foot, we'll expect the 17th set of tyres to be arriving soon. 

TECH SPEC: BMW 1M

STYLING

MMR Performance decals; carbon fibre boot lip spoiler; carbon diffuser; carbon mirror caps.

TUNING

N54B30T0 3.0-litre straight-six turbo; MMR Stage 2 remap; MMR intercooler; MMR charge pipes; Arma/Pipercross V1 carbon fibre intake system; valved Akrapovic exhaust with decat downpipes; carbon fibre engine cover; 6-speed manual; Wavetrac diff.

POWER

420bhp (approx).

CHASSIS

19in OEM wheels with Michelin Pilot Super Sport tyres; Bilstein B8 dampers; Eibach Pro Kit springs; Eibach anti-roll bars; Alcon RC6 forged six-pot front callipers with 384x34mm discs; Alcon RC4 forged four-pot rear callipers with 360x30mm discs; MMR braided brake lines.

INTERIOR

M Performance seats; M Performance steering wheel with display and rev counter.

THANKS

To the suppliers who've provided products, and the ones who've borrowed it and brought it back in one piece! www.mmrperformance.co.uk



The 17th set of tyres are on order



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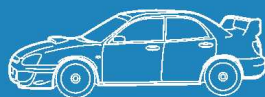


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FAST Projects



SLIM JULES' BMW E91

P088

Now it's winter and the sun has disappeared, Jules has decided it's the perfect time to get some tints...

Start**Never Finished****MAIN MODS:** HYDRO-DIPPED INTERIOR • BC COILOVERS • TINTS • DIAMOND CAR MATS

MIDGE'S BEETLE 1.8T

P090

The Bug might look a bit rough on the outside but it's lovely on the inside. A bit like Midge himself.

Start**Never Finished****MAIN MODS:** K&N INDUCTION KIT • COBRA RECLINERS • SMOOTHED FRONT BUMPER • AIR LIFT SUSPENSION

GLENDAS' AUDI RS4

P092

Glenda has finally got his dodgy alignment sorted. And he hasn't been anywhere near a dentist.

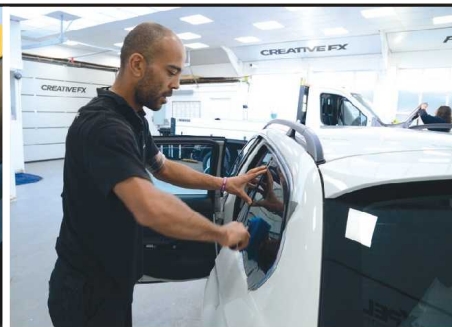
Start**Never Finished****MAIN MODS:** MILLTEK EXHAUST • KW COILOVERS

WIN ME FREE FIDDY

P094

Christmas has come early for Richard Spurgeon. The 350Z's lucky new owner.

Start**Finished****MAIN MODS:** EBC BRAKES AND LOTS OF PLANS • RED LINE LUBRICANTS • PB COILOVERS • JAPSPEED EXHAUST



Tom worked away diligently, oblivious to the lifeless body in the boot

JULES' BMW E91 325i

IT MIGHT BE WINTER, BUT THE SUN IS STILL SHINING ON JULES' E91... SO HE'S OFF TO DO SOMETHING ABOUT IT...



Ray-Ban, Oakley, Prada, D&G... what's your favourite brand of shades? For me, the best shades are the ones you put on your car windows. Yup, window tinting might be considered an old-skool mod, but it's still as popular as ever, and for good reason too.

Now don't get me wrong, the whole purpose of taking my car to Bromley and getting Autoworx UK to tint the windows was purely for aesthetic reasons. I'm a bit vein like that. Much like the celebrities who prance around in their Versace bins. But there's a whole load of other advantages to tinting your car windows...

Not only do they look awesome, but they'll increase the security and privacy of your vehicle, reduce UV rays by 99-percent (if high-quality film is used, like the XPEL Autoworx UK recommend) and also reduce solar heat gain by 49-percent – particular useful in the summer at shows when your car has been in direct sunlight all day.

So yeah, there's more to tinting than meets the eye (pun very much intended).

Now, I've had a lot of my projects tinted in the past, pretty much all of them and all by top installers. But I haven't had a car tinted in Kent for over a decade, because I've been living in the West Country up until pretty recently. This lead me to look for a new window tinter and after a quick search and a bit of research I decided to contact Autoworx UK. After speaking to Tom (the boss), who's been in the trade for almost two decades, I subsequently booked my car in.

Now, I was fully expecting to rock-up and prepare myself for the five-hour wait while the guys stripped the doorcards off and got to work. The waiting is one of the very few downsides to tinting. Or rather, it was.

Tom works with master-installer Neil to get things sorted in double quick time! They informed me there was no need to

remove the doorcard completely anymore as this was quite an old-skool technique and completely pointless on my car. As you can imagine, this cut down installation time massively. How long did the whole process take? Less than an hour. And they can do it even quicker when a fat bloke isn't getting in the way taking pictures and asking annoying questions.

"The window tinting game has moved on in the last 10 years," said Tom. "People want a quick turn around. And to make window tinting cost effective for us, but more importantly, for the customer, you have to be efficient with the installation process. We still use the best products and complete the job to high standards, and our lifetime guarantee backs that up!"

So there go. If you want to improve the look of your car in less than an hour and live near Bromley, hit up Autoworx UK. They have the official Slim Jules seal of approval.



To me...



... to you



Welcome to the dark side



THIS MONTH

Parts

Estate car window tinting £214

Total £214

CONTACTS

www.tintingwindows.co.uk
0208 6583111

NEXT MONTH



As a Christmas present to me, I'm going to fit the BC coilovers and Remus exhaust...



A new door was on the cards



Careful does it...



MIDGE'S RUSTY BUG

IT'S WHAT'S ON THE INSIDE THAT COUNTS. NOT WITH MIDGE. HE'S BASICALLY A BASTID. BUT WITH HIS LITTLE TURBO BEETLE...



In the last issue you may remember that I was mighty busy painting my Beetle all nice 'n' rusty for TRAX. Well, this month I've been mostly laughing my arse off using it as a daily driver.

Sometimes I forget what it looks like on the outside and wonder what the hell people are staring at! Still, I've never had a car get so many thumbs up from other VW drivers and I guess that says it all.

Anyway, one thing you wouldn't have seen, unless you were at Silverstone for the show (or you live in the sunny Dartford area), would be the new interior. I didn't have enough space to talk about it in the last Fast Projects, so here's a rather belated lowdown about what else I got up to in the few days before TRAX.

Now, I'd had my spanking new Petronas-style teal interior sitting around in the workshop for a few weeks, waiting for me to pull my finger out on the paintwork. With that sorted though, I could finally get the new seats in, a job that only took an hour or so. And what a difference an hour can make, eh? Unlike the outside, the interior now looks distinctly not shit.

At the risk of banging on about it, I'll say it once more: Cobra have done an amazing job on these. The Misano recliners look spot on with the small diamond stitching, and the same goes for the rear bench.

But what really makes the whole package is the details, like the doorcard inserts and the arm rest. Speaking of those doorcards too, they took a little longer to install, because I not only had to put them back together but paint them black and wrap the original silver tops to match the beige on the outside. Painting I can handle (That's debatable – Jules), but wrapping? Nope, that's guaranteed to boil my piss.

Luckily my mate Bobby, the main man at Tauro Designs, is just around the corner. So I popped them in and he, er, got his missus to sort them out!

To be fair, he was messing about with half a million quid's worth of Lambo at the time. Although I'm not sure that's more interesting than my Bug? Within the hour, though, I was back in my workshop, bolting them on and, suddenly, all was right with the world.

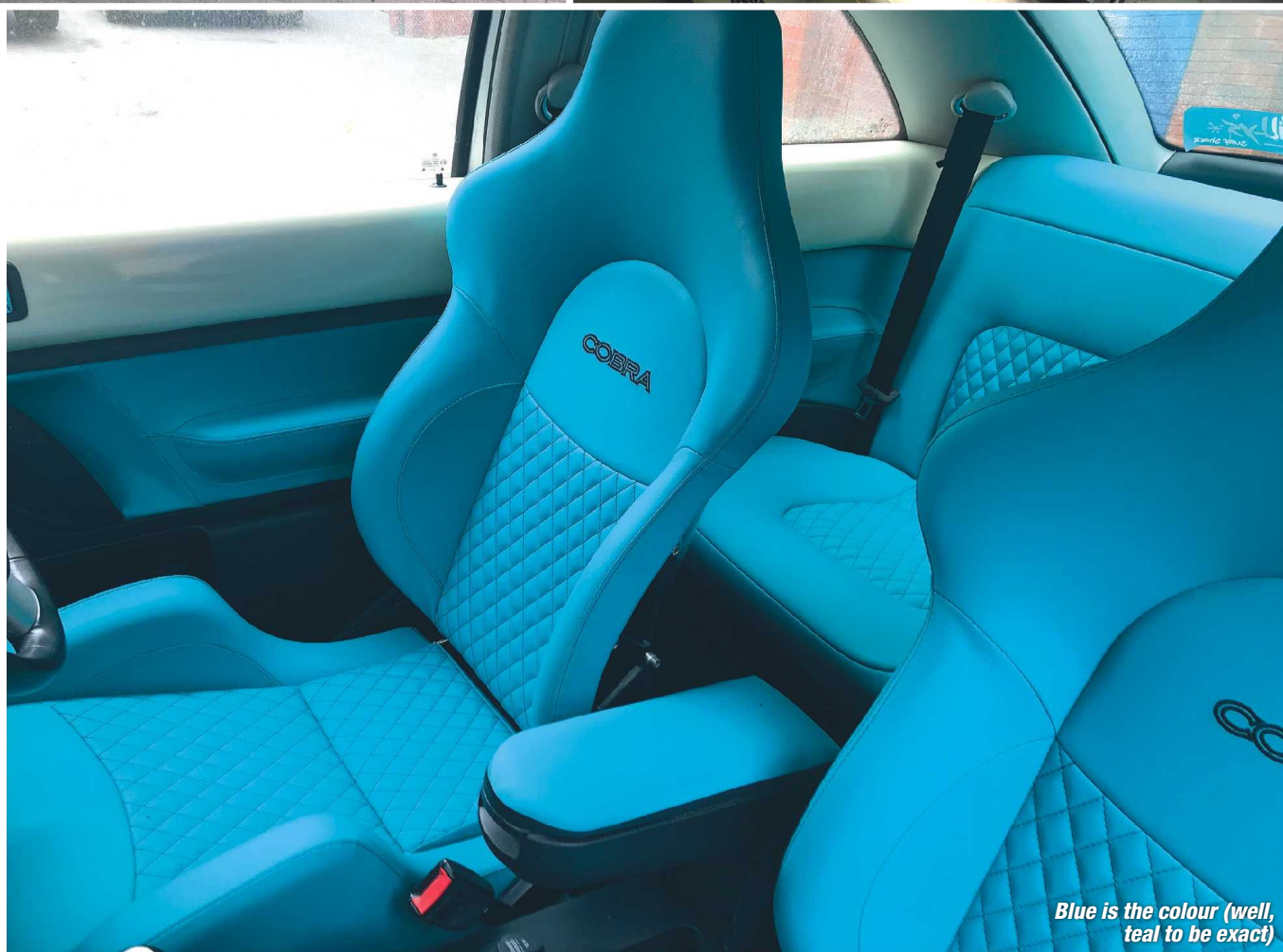
What a transformation! Of course, I'm still a little way from finishing off the interior exactly how I want it. Getting the back of the seats wrapped, hydro dipping a few dash bits and picking a steering wheel are priorities. Well, I say priorities. To be fair, all that can be sorted while I'm doing some TT stuff over winter. In the meantime though, I'm off to enjoy the car and search for a fire extinguisher. My credit card appears to be smoking!



The teal deal



Job's a good 'un



Blue is the colour (well,
teal to be exact)



THIS MONTH

Parts

Interior	£1,700
Door wrap	£100
Paint	£14

Total.....£1,814

CONTACTS

Cobra Seats

www.cobraseats.com

Tauro Designs

www.taurodesign.co.uk



Stat attack!

Vehicle Measurements and Adjustments			
Audi: A4/S4/RS 4 Quattro: 2001-08 (B6/B7): Avant (Wagon): RS 4 Sport Suspension (2VE)			
Save the "before" measurements before making adjustments			
Front	Left	Right	
Camber	-1°19'	-1°30'	
Cross Camber	0°11'		
Caster	4°41'	4°56'	
Cross Caster		-0°15'	
Toe	-0°03'	0°15'	
Total Toe		0°13'	
Toe (Raised)			
Cross Toe (Raised)			
Rear	Left	Right	
Camber	1°20'	-2°04'	
Cross Camber		0°44'	
Toe	0°18'	0°17'	
Total Toe		0°34'	
Thrust Angle		0°00'	
This vehicle may be adjusted with WinToe.			
Show Secondary Measurements	Show Bar Graphs	Measure Caster	



New plates FTW



GLENDAS AUDI RS4

AFTER A NEW SUSPENSION SYSTEM, OUR GLENDAS GOT HIS WHEEL ALIGNMENT CHECKED – AND GOT A SURPRISE



If you saw last month's Fast Projects entry, you would have seen that I finally got around to changing the standard DRC suspension system for some KW Automotive V1s.

Well I'm proud to report they are now fully bedded in and the car is handling like a dream. However, like any sensible person, I thought I had best get the wheel alignment checked out, too.

There are plenty of wheel alignment places about in Bristol, but not many that offer four-wheel alignment.

Luckily for me though, Bristol Wheel Alignment is just round the corner from Glenda Towers and, better still, they offer state of the art 3D four-wheel alignment on their rather clever Hunter wheel alignment system.

To be honest, I didn't think the alignment would need any major changes, as we paid close attention to where everything was and marked things up during the suspension swap. But how wrong I was. My alignment wasn't just out. It was out out!

Anyway, in less than 30 minutes Aron Peter of Bristol Wheel Alignment waved his magic alignment wand (well spanner and ratchet anyway) and the RS4 was all correct and good to go.

It goes to show, even if your car feels right, the alignment can be well out. So get it sorted! And it's a damn sight cheaper than replacing badly worn tyres every year.

My next little job was changing my old tired-out numberplates to some freshly pressed ones I picked up from the guys at

Europ18 at TRAX. It's something I wish I had done sooner, as it's amazing the difference a set of fresh plates makes.

Anyway, that's my lot this month. Later.

SPENT THIS MONTH

Parts

Wheel alignment..... £60
Numberplates..... £30

TOTAL..... £90

CONTACTS

Bristol Wheel Alignment

<http://bristolwheelalignment.co.uk>

Europ18

www.pressedplate.com



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#FC PROJECT FREE FIDDY

ITS TIME TO HAND THE CAR OVER. BYE BYE FIDDY. WE'RE GOING TO MISS YOU... (SOB)



We've had an absolute blast razzing around in our bona fide Japanese muscle car over the past six months or so. It's made an appearance at all the UK events, logged some serious hours in the workshop, and we've dropped a skip-full of cash building it up to be the perfect basis for any long-term project.

But now it's all over. No more shall we roll around town using every one of its 300-odd horsepower to impress the ladies (and make it look like we've actually got a few quid). And that makes us a bit sad.

Still, it's not all bad. For the new owner, Richard Spurgeon, the news is clearly rather good. We've always known we'd have to give the car away of course, but just after TRAX we saw him pick up the keys. Well, I say pick them up, more like physically crowbar 'em out of our clutches!

Anyway, rewind just a few days, and the last thing to finish on the 350Z before the show was to wrap our stunning Hyper Black 9.5 and 10.5x18-inch AutoStar hoops in Nankang rubber.

We chose 245/35 and 275/35 tyres, so there wasn't an extreme stretch, whacked them on and the job was complete. This car really did turn out nice, didn't it?

Unfortunately though, the publisher still was adamant that he wouldn't let us keep it. So up to Silverstone it went to await the draw for a new owner. As it turns out, Richard here was holding the golden ticket at 4 o'clock... and we're sure he won't mind us saying he's a jammy, jammy bugger!

In fact, what's even luckier is that this competition has been running at all the events over the past season, and Richard

only entered after hearing a tannoy announcement at TRAX, just an hour before the draw! Dreams really do come true, eh?

So Richard is extremely happy, and we're extremely happy for him, even if we'll miss the big, bad Nissan being on the Fast Car fleet. Well done mate. We hope you enjoy it as much as we did.

In other news, we're all off to look for a giveaway car for next season – any ideas?





The final mod was some Nankang rubber



One very lucky young man

Final Spec

Full steam valet; PB coilovers; Japspeed K4 exhaust system; Mishimoto intake; EBC USR discs with Yellowstuff pads; 9.5 and 10.5x19 AutoStar wheels with 245/35x19 and 275/35x19 Nankang tyres; Tarmac Sportz front lip and side skirts; tinted windows and headlights, colour-coded door handles and badges; interior refresh and repaint; Pioneer doubleDIN Bluetooth headunit.

CONTACTS

AutoStar Wheels – www.autostarwheels.com
PB Brakes – www.pbbrakes.com
Japspeed – www.japspeed.co.uk
Nankang – www.nankangtyre.co.uk
EBC Brakes – www.ebcbrakes.com
Mishimoto – www.mishimoto.co.uk
Tarmac Sportz – www.tarmacsportz.co.uk
Phantom Tinting – www.phantomtinting.co.uk
RJS Steam Valeting Services – <https://ecosteamvalet.co.uk>

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Eight ballin'

Stop the hate, get a V8. A V8 that can trace its heritage back to a Formula 1 car, a V8 capable of 10,200rpm and 560bhp at maximum attack. Little wonder this E36 sounds like God arrived at full chat...



Every now and then a car comes along that is so ferocious and so fierce that you simply can't ignore it. A few seconds of wide-open-throttle application via the power of social media and a decent set of speakers, and you're in deep – hook, line and sinker into the build and its ancestry. What is it? Why is it making that much noise? How is it firing sparks from the tarmac from what appears to be – well, on the surface at least, a 1990 E36 BMW 320i?

As those sparks fly from the undercarriage and the aero cannards lock it onto the tarmac, hairs stand up on the back of your neck and you watch the video again and again, each time turning the volume up just that little bit louder. It's seriously addictive stuff, automotive noise candy if you will.

As you may be aware, this is no ordinary BMW 320i. In fact it's a continued work of almost constant evolution from a man widely regarded as one of the most respected hill climbers of our generation. The man in question? Georg Plasa, a guy who pretty much dominated European hill climbing from 2003 to 2009.

At the age of just 13 he built his first cart, an aluminium space-frame affair with a 5.4hp scooter engine on board. Georg spent more than two decades not only furthering his own hill climbing career, but also helping others to improve the competitive nature of their cars in order to make the sport more attractive to competitors and fans alike.

He is, and there's no other word for it, a legend amongst the hill climbing fraternity, never more so than in Germany and Austria. Put it this way, he regularly offered setup advice to his competitors and even told them what he'd done to his car to get a few extra tenths out of it. Back in 1975 he also uprated his 'cart' with a 13.6bhp Goggomobil engine and so was born racecar, Plasa no.1.

It was the basis for future greatness. Having graduated through both 2002, E21 and even E30 rally cars in his early adult years, the time soon came for something more modern along with a slightly different discipline (we'll come to that in a moment).



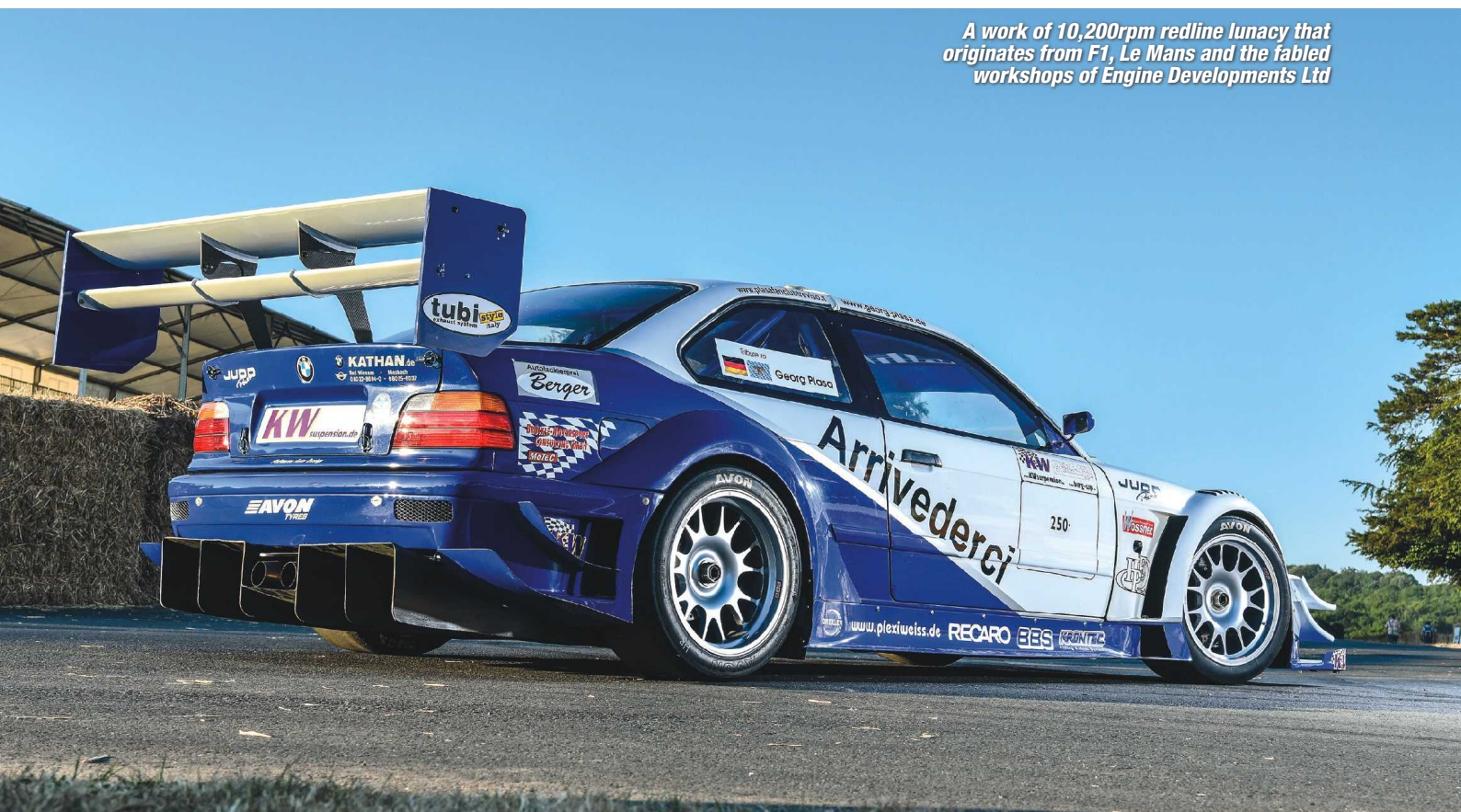
3278cc naturally aspirated Judd KV675 V8 engine can push the E36 to 211mph

A brief history

Now for those who don't know, hill climbing is generally a form of amateur motorsport. In fact it's the oldest form of motorsport to have graced the planet. Events are said to have taken place as early as 1905, while La Turbie near Nice recalls competitions being staged in 1897, so it's safe to say it's intrinsically linked to the birth of the motor car.

The aim is simple. Get to the top of the hill as quickly as possible. The machines used for the job are generally sub-divided into different classes based upon engine size, suspension modifications, chassis design, body type and so on. But fundamentally the unlimited class of European hill climbing was the equivalent to F1 on track, albeit without quite as much investment – no TV rights or Bernie Ecclestone.

A work of 10,200rpm redline lunacy that originates from F1, Le Mans and the fabled workshops of Engine Developments Ltd



Wowzer. Hello big boy...



For Georg Plasa that meant he had to build, modify, fund and maintain his E36 BMW on a comparative shoestring budget, but thanks to his good friend Klaus Wohlfarth (the KW of KW Automotive) he was able to compete and excel in his Elite class for more than a decade.

This world famous E36 still holds track records for St Agatha and Mickhausen. It was, and still is, weapons grade machinery. That was backed up recently during a commemorative trip to the Goodwood FOS where it completed the famous hill climb in 46.43 seconds, placing Joerg Weidinger in third place overall in the King of the Hill category and just 2.5 seconds behind the podium-topping Volkswagen I.D. R Pikes Peak electric prototype racecar.

Oceans 8

So, you might well be asking, what made the car such a vicious competitor in the very top tier of the German and Austrian FIA Hill Climb Cup? In a word: a V8.

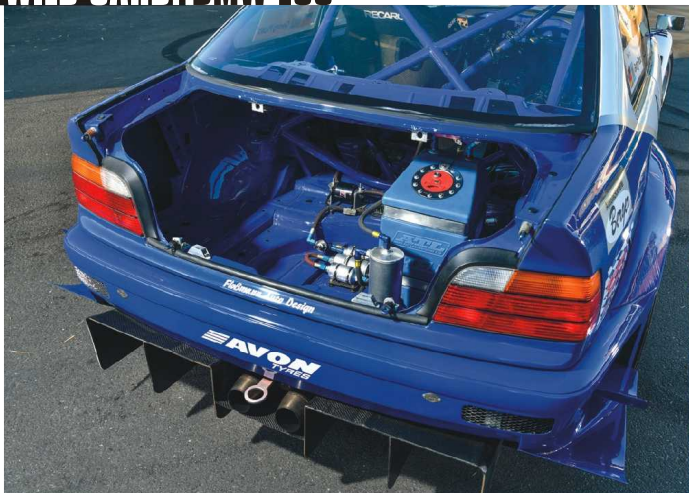
And what a V8 it is. A seminal work of 10,200rpm redline lunacy that displaces 3278cc and originates from the lofty heights of F1, Le Mans and the fabled workshops of Engine Developments Ltd. Thanks to its Judd range of power plants, this particular specimen is a KV675. John Judd and Jack Brabham setup their firm to build engines for racing in the early '70s, but this particular V8, an engine that was used as an evolved Le Mans motor, is a development of a Formula 3000 engine redesigned with a capacity increase to withstand the relentless onslaught of 24-hour endurance racing.

Nevertheless, its roots are directly descended from the granddaddy of motorsport, F1. Were it to go on the TV programme Who Do You Think You are? it might be surprised to learn its granddad once sat behind the likes of Emerson Fittipaldi. Georg built this car himself, in his own garage, and was amongst the first privateer without manufacturer support to implement such a radical power-plant solution into a 'production car' chassis.

It now runs on Motec M800 engine management with launch and traction control, uses a sequential Hewland six-speed gearbox



WILD CARD: BMW E36



that's shiftable under full throttle and transmits its power to the back wheels via a CTG Torqueline carbon fibre driveshaft – on that basis it's safe to say that nothing on this car is quite as it seems.

The suspension pickup points have been radically altered and Georg, naturally, relies up on seriously whizz bang set of KW three way adjustable hill climb-specific, remote reservoir coilovers with KW competition top mounts. Thanks to fully adjustable anti roll bars and a smattering of suspension components produced in magnesium, it is nothing short of extraordinary, something that's further reinforced by titanium centre-lock hub spindles. Not a wheel adapter in sight here ladies and gents.

Hanging from those centre lock hubs are a set of 10 and 10.5x 18-inch BBS one-piece forged magnesium motorsport wheels, shod, somewhat unsurprisingly, in Avon racing slicks that measure a girthsome 275/650 and 285/650 x 18-inch. When the car was re-commissioned by KW, they approached Avon, who no longer offered the sizes they required. But after much deliberation it was decided to modify some existing moulds to make four more sets of the slicks for the E36 Judd V8 project. Petrolheads at their finest.

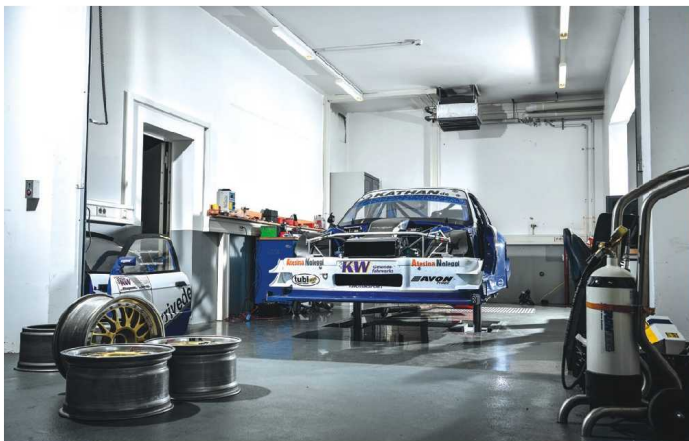
And did we mention that with the right aero setup, it's also capable of 211mph! Yep, that's right, the aero is fully active and adjustable to provide a co-efficient of drag that varies between 0.36 – 0.51 depending upon discipline or course. With a kerb weight of just 895kg it's also been stripped, lightened and optimised to within an inch of it's very metal fibre. That's why so much of the bodywork is now made from that carbon twill – the boot, doors, bonnet, bumpers, wings, cannards and the rear wing all being constructed from old dinosaurs.

Over the limit

With much sadness Herr Plasa lost his life in 2011 at the 50th Coppa Bruno Carotti in Italy following a 120mph head-on collision with a rock face in his BMW 1-series, Judd V8 powered hill climber. His death had a huge impact upon Klaus Wohlfarth, so when Georg's brother contacted Klaus and said several race teams were interested in purchasing the E36, it was only natural for Klaus to get first refusal. Having quietly acquired Georg's BMW from the family after matching the highest bid and promising he'd rebuild the car sympathetically without losing any of it's motorsport legacy, it sat

for several years, as Georg's friends and family continued the grieving process, before they decided on a plan for their friend's beloved racecar. His good friend Klaus employed the services of almost the entire motorsport community to resurrect this work of art, and it's a fitting testament to a man who was loved by many, respected by more and who changed the face of European hill climbing forever.

It is, like many racecars, a masterpiece of engineering, devotion and love from all those involved. The intricacies of it are mind-blowing, more so than we can even comprehend, but that doesn't mean we don't love it immensely. You should to, especially if you choose to go on Youtube and enter 'JUDD E36 V8' into your browser. Do it. Your life will change for the better. It certainly did for Joerg Weldinger when he took to the carbon-fibre Recaro and smashed it up the Goodwood hill climb, V8 revs flaring, crowd on the edge of their seats, heartbeats elevated, neck hairs raised. As a fitting testament to a true legend, we can't think of a better way to end this feature than by saying, Georg, people love you. [F4](#)





TECH SPEC: BMW E36

ENGINE

3278cc naturally aspirated Judd KV675 V8 engine with 560 bhp @10,200 rpm; Motec M800 engine management with traction and launch control; top speed 211mph with lower coefficient of drag; custom fuel system with ATL fuel cell and high flow Bosch fuel pumps.

TRANSMISSION

Hewland six-speed sequential; full throttle flatshift; CTG Torqueline carbon fibre propshaft.

CHASSIS

Custom-build lightweight chassis based on E36 320i; KW three-way remote reservoir hill climb spec coilovers with custom spring rates; AP Racing 365mm front discs with six-piston callipers; 340mm rear discs with four-piston callipers; Teves four channel ABS system; BBS Motorsport one-piece forged Magnesium wheels in 10x18in and 10.5x18in with Avon race slicks, 275/650R18 and 285/650R18

BODYWORK

Custom-made carbon-fibre bonnet, boot, wings, doors, bumpers, aero cannards, rear wing.

INTERIOR

FIA approved multi-point roll cage; carbon-fibre Recaro Pole Position; custom-made mil-spec wiring loom and control panel; plexiglass windows all round.

KERB WEIGHT

895kg (wet).

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Pictures courtesy of Stevie Clay

MICHAEL TINSLEY'S MK4 GOLF GT TDI

FC says: If there's one thing you can rely on with a modified VW owner, it's that their car is likely to be super clean and suave, with every fine detail carried out with nothing but precision and perfect execution.

Michael's Mk4 GT TDI Anniversary model here is no exception to this rule. Built to celebrate 25 years of the GTI and as a send-off for the much-loved Mk4 platform, this fiery diesel has been sumptuously upgraded with a strict 'OEM+' theme in mind throughout.

Now dropped on a custom air suspension system onto some tasty BBS rims that offer up millimetre-perfect levels of stance, Michael's added to the exterior upgrades with US-spec

bumpers, stubby Lupo mirrors and even a full re-spray in the car's factory hue, to show he's really not messing about.

Under the bonnet, that PD150 oil burner now kicks out somewhere in the region of 250bhp thanks to a larger turbo, an intercooler ripped out of an Audi S3, as well as custom exhaust and fuelling systems to boot.

The interior hasn't been left unturned, either. Now boasting the likes of carbon fibre trim touches and a steering wheel and gearknob from the more modern Mk5 GTI, which really freshen things up.

This one's so clean we'd happily eat our dinner off it. Tasty stuff!

SPEC: MK4 GOLF GT

MAIN MODS

Full re-spray in factory colour; US-spec bumpers; Lupo 'stubby' mirrors; BBS RS700 (front) and RS701 (rear) staggered alloys; R32 brakes and hubs; Slam XL front air struts; Firestone rear air bags; V2 air management; GTB2260BK turbocharger; Audi S3 intercooler; custom exhaust; custom fuelling system; Anniversary interior with carbon fibre trim; Kenwood ICE; Mk5 Edition 30 gear knob and steering wheel; half-sunk ICE/air boot build.





JAMES HARPER'S BMW E36 COMPACT

FC says: Take one dainty BMW E36 Compact. Drop in a hefty straight-six engine from a 328i from the same era, and tweak it up a bit. Then, weld up the rear differential and completely gut the interior. What're you left with? One absolutely hilarious drift car, that's what!

Say hello to James' most recent creation: solely designed to light up rear tyres at a moment's notice. Originally an honest Dakar Yellow road car, he's been busy recently transforming it into something that has much more of an appetite to go sideways, with this being the final result.

With the aforementioned swapped-up motor receiving tweaks such as a beefier manifold and fuel injectors, the car's now good for around 200bhp – an awful lot for a lightened little Compact's rear tyres, that's for sure! The sparse cabin has been designed for the job, too, with two bucket seats the only creature comforts you'll find inside.

James' ride proves you needn't spend thousands on a tasty boosted slice of JDM metal in order to have all sorts of fun on a drift day, you just need to get a little creative. Top job!

SPEC: BMW E36

MAIN MODS

M52B28 engine swap; M50 manifold; Pink injectors; stainless-steel exhaust system; welded diff; stripped interior with bucket seats and Takata harnesses; Extreme Offset front wheels; skid-friendly rear wheels.



JOSH HUMPHREY'S VAUXHALL CORSA VXR

FC says: We love a limited-edition car model, so it's no wonder we've got something of a soft spot for Josh's Corsa VXR 'Racing' here.

This is just one of a handful of these rare examples to be built, and they benefitted from the likes of a Flame Red paintjob, black alloys, subtle aero tweaks and some sumptuous leather Recaro seats, to boot.

Josh has only added to the excitement, too, with plenty of pretty serious alterations taking place since he bought it. "It's never been dyno'd

but I imagine it's producing around 240bhp now... not bad for a 1.6!" he tells us.

Engine upgrades consist of the likes of a Scorpion exhaust and Badass Performance induction kit.

To add to the car's unique looks, the bonnet and roof have been wrapped in a contrasting black hue, with a Maxton Designs splitter also taking pride of place up front.

It's fair to say Josh now has a seriously formidable little hot-hatch on his hands!

SPEC: CORSA VXR

MAIN MODS

Full Scorpion de-cat exhaust system; Badass Performance induction kit; K&N cone filter; coilovers; Maxton Designs front splitter; vinyl-wrapped bonnet, roof and vents.



JONATHAN SHAW'S NISSAN 350Z

FC says: Rewind two years or so and young Jonathan here was gracing these very pages with the Corsa C he owned at the time.

In that feature car write-up, he hinted that owning a Nissan 350Z was his ideal future plan. And guess what. He's only gone and ruddy done it!

Welcome to his stunning new car, then: this grey, '04 example of the celebrated V6 coupé that he's already managed to transform to make a little more memorable. The most striking enhancement so far has to be that muscular

Nismo front bumper that adds a whole new dimension to the front end when topped off with the angular canards.

The car is also rocking a K&N air filter and full Milltek exhaust system, to bring out more of that V6 rumble we all know and love.

His plans for a remap, to tie all the mods together, will be coming along very soon indeed.

It's always very pleasing to see an owner's car dreams come true. So we hope 350Z ownership is everything you hoped it would be and more, Jonathan!

SPEC: NISSAN 350Z

MAIN MODS

Nismo V2 front bumper; Milltek de-cat exhaust system; K&N panel air filter.



GARY WILLIAMS' BMW 335D

FC says: If you know anything about cars, you'll probably be aware of the seemingly impossible capabilities that sporty diesel BMWs can achieve of late. Able to smash supercars whilst retaining stratospheric MPG figures in ways that most other models could only dream of.

This idea is seen perfectly in the real world with a beast like Gary's E92 335D coupé daily driver here.

Now boasting around 400bhp from its six-pot oil burner, thanks to a beefier intercooler and the removal of the clunky DPF and EGR systems, this RWD brute is undoubtedly a joy to drive when

you're in the mood for some fun! The performance upgrades have been acknowledged with some subtle visual tweaks around the car to help it further stand out from the crowd.

Perhaps the most obvious of these comes in the form of those delicious staggered Rota rims that succeed in adding only the most muscular of stances that would leave even an M3 red-faced.

Also dropped on some BC Racing coilovers and being treated to a slightly more lairy boot spoiler, it really does seem like Gary's hit the nail on the head with this fine build.

We salute you, sir!

SPEC: BMW 335D

MAIN MODS

Up-rated intercooler; DPF and EGR delete; BMW Performance rear spoiler; BC Racing coilovers; staggered 19in Rota Grid alloys.

SHOW US WHAT YOU'VE GOT!

Here's your chance to show off both your ride and your photography skills in the pages of *FC*. To enter your car just open a fresh new email, put 'Readers' Rides Submission' in the subject line and send us a few pics of the best bits (larger than 1MB with no ghosting or logos, and you must have the photographer's permission) along with a short spec and a paragraph telling us why your motor deserves to adorn these hallowed pages. Ping the whole lot over to jules.truss@kelseymedia.co.uk and we'll do the rest.



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Quotes of the Month:



Midge: "I can see from the bin that you've finished lunch, is that all yours?"
Jules: "You cheeky bastard!"



Midge: "So what exactly does a \$120 steak taste like then?"
Jules: "Tastes amazing, especially when you're paying."

Jules: "Midge, how the hell did you manage to use two bog rolls in one night while I was sleeping?"



Midge: "What's with this seat, do I need to cut my right leg off? They're taking the piss 'cos I'm short."
Jules: "You need to know how to open the door, too!"
Midge: "What? I didn't know I was now part of the bloody crew!"

Midge: "28-dollars? For a piña colada... you wanna get yourself a mask and a stripy jumper love!"



Jules: "Actually, when I said I'd like to see a blonde with some big plastic tits tonight..."

Midge: "No you bloody well can't be big spoon."



Snapper extraordinaire

Top marks to Luke from Plush Automotive for sorting out the boys with their request for a 'proper picture together' (we think it may be their wedding photo or something). All we can say is that we're glad our old buddy builds better cars than he takes photos!



Classy décor

One of the best things about the big resorts is the small details, just look at the chair that Midge fell in love with at the Cosmopolitan hotel. Mind you, it wouldn't be the first time he's dreamt of sitting on Johnny Depp's fa... er, never mind.



Do what?

What's all this about? Fill your own mini donuts? At 18-quid a pop you'd think they would have done that for you! Luckily though, our Midge is a dab hand with a syringe, he is from Dartford y'know.



Room with a View

After years of looking at some motorway or a parking lot, our boys finally did it - in spectacular baller style they blagged, (and by blagged we mean paid-for) a balcony room with a view. Ahhh how very romantic, you just can't beat the city of love... Paris!



Class traitors

What with our Jules being thin nowadays, you would think that the fellas would stop insisting on flying business class. But no, it's not the legroom they're after, it's just that they're both like a couple of tarts when it comes to shopping. It's the 40kg baggage allowance that comes in handy.

TOP VEGAS TIPS



GAMBLE

After all that's what this crazy town is all about! But, when you think about it, it's the only night out in the world where you stand a half-decent chance of getting some of your money back. Oh, and don't forget you get free drinks at the tables, too!



EAT, EAT AND EAT

There's over 2000 places to eat on The Strip alone, so you're not gonna starve. That said, every hotel has its own massive buffet and they're all absolutely epic, with a choice of just about everything you can imagine. See if you can get your travel company to throw in breakfast, it'll save you a mint!



GET BLATTERED

Believe it or not, the Yanks take their beer deadly seriously and, what with various 'happy hours' going on around town, it would have been rude of our boys not to follow suit. If you're after the coldest larger in Vegas, get yourself along to Twin Peaks. You'll love it!



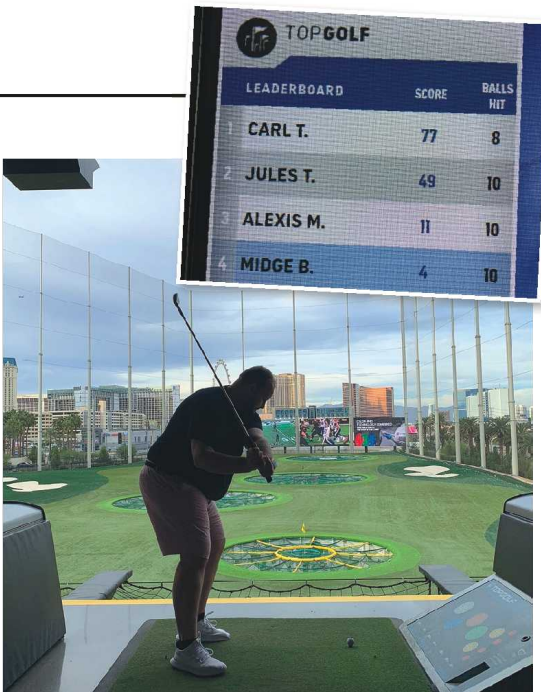
Winner winner steak for dinner

While you don't have to chuck money around like you're Elton John, you will spend a few quid - the only budget you can do Vegas on is a big one! That said, there's always the chance to win big... and you'll need to if you fancy a steak in STK!



Leaving Las Vegas

There's an age-old FC tradition which states that, no matter how shite you feel, you have to go to Fatburger on the last day. Fair play to Jules for going all-in this year though, 44 isn't his order number - it's how many patties he had in his burger!



Sports Fans

They love their sports in the US, to the point that the constant American football will, almost inevitably, get on your tits. As for getting involved, our boys prefer something a bit less physical, and can highly recommend the thrills and spills of Top Golf. Anyway, here's proof that Midge is officially shit at any sort of sport... even the ones where you don't have to do any running.



Nutritional Advice - Part 8

We haven't had any nutritional advice from Jules for a while, but we all know that beer-free diets don't count on holidays (er, 'work trip' thankyou - Jules). So, what was the verdict? Well, he put on a stone but he's still 8-stone down, so that's a win in our book! It must have been that pesky salad that did it.

VIVA LAS SELFIE

We always look forward to raiding the boys' phones when they get back, just to see all the magical sights of Vegas. Unfortunately though, this year they seemed to have spent all of their time taking selfies. Check out these far-too-ugly-for-Instagram highlights. #tossers



GO SHOPPING

There's hundreds of designer shops on The Strip, but if you love seeking out a bargain, then check out the North, or South, Las Vegas outlets. Both are around a 10-minute Uber ride from The Strip. Just don't forget that, not everything you buy looks good (What you saying? - Jules!)



HIT THE POOL

You're essentially in the middle of the Mojave Desert and, even in early November, it's pretty bloody hot. All the hotels have at least one pool so, don't forget those swimming trunks and dark sun glasses to hide your wandering eyes... if you catch our drift.



SEE A SHOW

Las Vegas is the live show capital of the world, so make time to go see some entertainment. Of course, you can always see something a little more manly than our boys (MJ Live in case you were wondering - Jules), we hear Sapphire gentlemen's club is the place to spend some cash.



GET HIGH

No, we're not talking about the ol' Jamaican Lambert and Butlers, even though all that's legal now. We mean get high, like really high, in the Skyfall Lounge on the 64th floor of the Mandalay Bay hotel. It's definitely not one for acrophobics - don't look down!

NEXT MONTH IN FAST CAR IT'S A NEW YEAR'S REVOLUTION...

HAPPY NEW

TOP SECRET

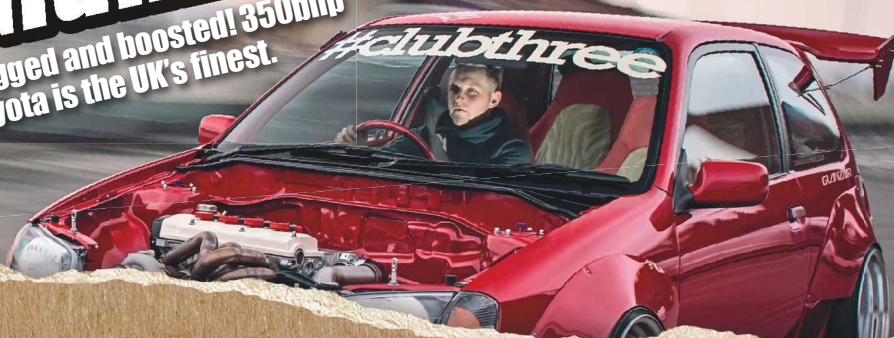
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